

A
B
C

SECTION INL

INTERIOR LIGHTING SYSTEM

D
E

CONTENTS

<p>BASIC INSPECTION 3</p> <p>DIAGNOSIS AND REPAIR WORK FLOW 3</p> <p style="padding-left: 20px;">Work Flow3</p> <p>SYSTEM DESCRIPTION 6</p> <p>INTERIOR ROOM LAMP CONTROL SYSTEM 6</p> <p style="padding-left: 20px;">System Diagram6</p> <p style="padding-left: 20px;">System Description6</p> <p style="padding-left: 20px;">Component Parts Location8</p> <p style="padding-left: 20px;">Component Description8</p> <p>INTERIOR ROOM LAMP BATTERY SAVER SYSTEM 9</p> <p style="padding-left: 20px;">System Diagram9</p> <p style="padding-left: 20px;">System Description9</p> <p style="padding-left: 20px;">Component Parts Location10</p> <p style="padding-left: 20px;">Component Description10</p> <p>ILLUMINATION CONTROL SYSTEM11</p> <p style="padding-left: 20px;">System Diagram11</p> <p style="padding-left: 20px;">System Description11</p> <p style="padding-left: 20px;">Component Parts Location12</p> <p style="padding-left: 20px;">Component Description12</p> <p>DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)13</p> <p>COMMON ITEM 13</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT Function (BCM - COMMON ITEM) 13</p> <p>INT LAMP 14</p> <p style="padding-left: 20px;">INT LAMP : CONSULT Function (BCM - INT LAMP) 15</p> <p>BATTERY SAVER 16</p> <p style="padding-left: 20px;">BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER) 16</p>	<p style="text-align: right;">F G H I J K L M N O P</p> <p>DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)18</p> <p>COMMON ITEM18</p> <p style="padding-left: 20px;">COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)18</p> <p>INT LAMP18</p> <p style="padding-left: 20px;">INT LAMP : CONSULT Function (BCM - INT LAMP)19</p> <p>BATTERY SAVER20</p> <p style="padding-left: 20px;">BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)20</p> <p>DTC/CIRCUIT DIAGNOSIS22</p> <p>POWER SUPPLY AND GROUND CIRCUIT ...22</p> <p>BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)22</p> <p style="padding-left: 20px;">BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure22</p> <p>BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)22</p> <p style="padding-left: 20px;">BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure22</p> <p>INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT24</p> <p style="padding-left: 20px;">Description24</p> <p style="padding-left: 20px;">Component Function Check24</p> <p style="padding-left: 20px;">Diagnosis Procedure24</p> <p>INTERIOR ROOM LAMP CONTROL CIRCUIT26</p> <p style="padding-left: 20px;">Description26</p> <p style="padding-left: 20px;">Component Function Check26</p> <p style="padding-left: 20px;">Diagnosis Procedure26</p>
---	---

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT	28	SYMPTOM DIAGNOSIS	82
Description	28	INTERIOR LIGHTING SYSTEM SYMPTOMS ...	82
Component Function Check	28	Symptom Table	82
Diagnosis Procedure	28	PRECAUTION	83
INTERIOR ROOM LAMP CONTROL SYSTEM		PRECAUTIONS	83
.....	30	Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"	83
Wiring Diagram - INTERIOR ROOM LAMP -	30	REMOVAL AND INSTALLATION	84
ILLUMINATION	32	MAP LAMP	84
Wiring Diagram - ILLUMINATION -	32	Exploded View	84
ECU DIAGNOSIS INFORMATION	35	Removal and Installation	84
BCM (BODY CONTROL MODULE)	35	Replacement	84
WITH INTELLIGENT KEY	35	ROOM LAMP	86
WITH INTELLIGENT KEY : Reference Value	35	Exploded View	86
WITH INTELLIGENT KEY : Wiring Diagram - BCM -	56	Removal and Installation	86
WITH INTELLIGENT KEY : Fail-safe	59	Replacement	86
WITH INTELLIGENT KEY : DTC Inspection Priority Chart	60	LUGGAGE ROOM LAMP	87
WITH INTELLIGENT KEY : DTC Index	61	Exploded View	87
WITHOUT INTELLIGENT KEY	63	Removal and Installation	87
WITHOUT INTELLIGENT KEY : Reference Value..	63	Replacement	87
WITHOUT INTELLIGENT KEY : Wiring Diagram - BCM -	77	SERVICE DATA AND SPECIFICATIONS (SDS)	88
WITHOUT INTELLIGENT KEY : Fail-safe	79	SERVICE DATA AND SPECIFICATIONS (SDS)	88
WITHOUT INTELLIGENT KEY : DTC Inspection Priority Chart	80	Bulb Specifications	88
WITHOUT INTELLIGENT KEY : DTC Index	80		

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

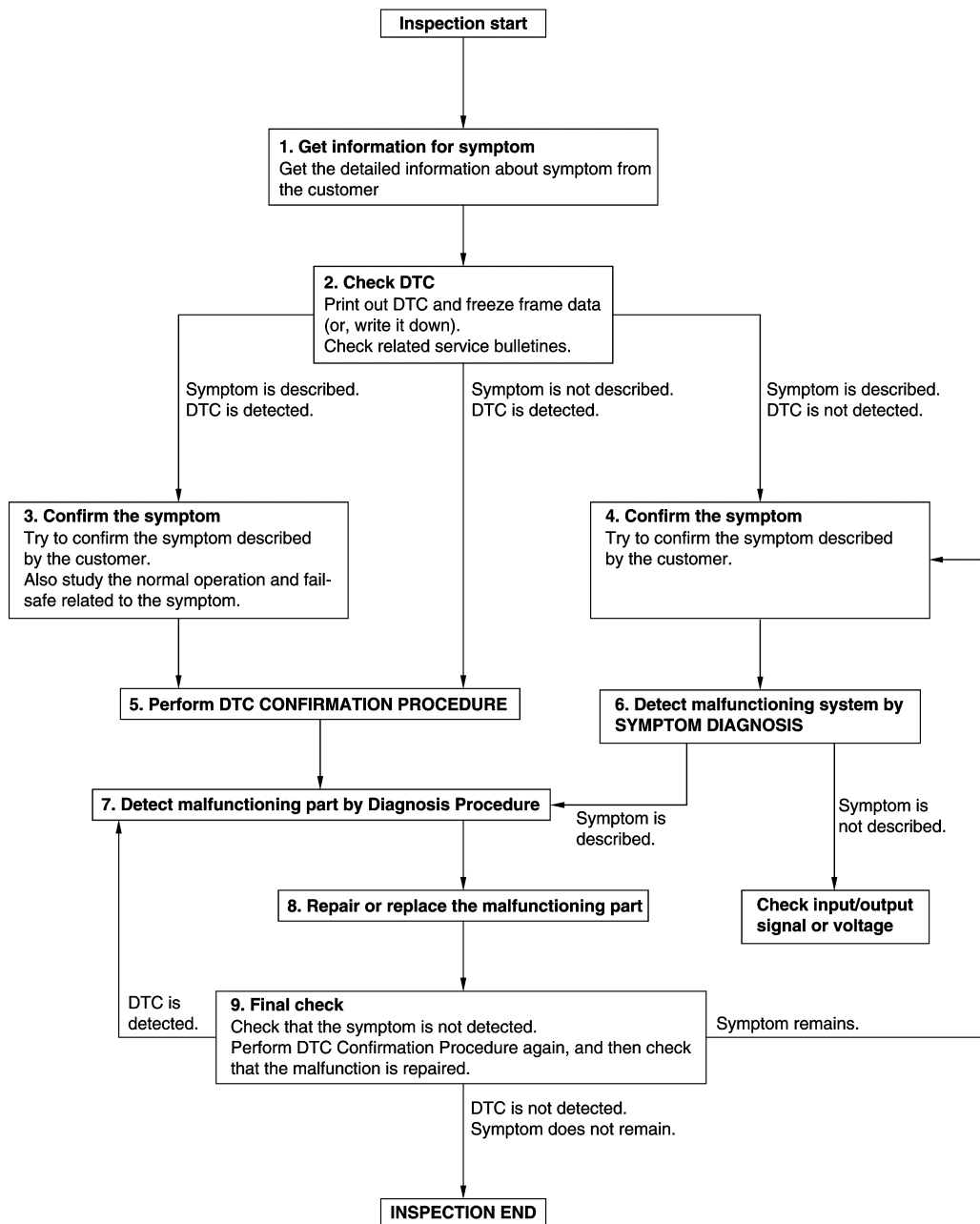
BASIC INSPECTION

DIAGNOSIS AND REPAIR WORK FLOW

Work Flow

INFOID:000000008452500

OVERALL SEQUENCE



DETAILED FLOW

JMKIA8652GB

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

1. GET INFORMATION FOR SYMPTOM

1. Get detailed information from the customer about the symptom (the condition and the environment when the incident/malfunction occurs).
2. Check operation condition of the function that is malfunctioning.

>> GO TO 2.

2. CHECK DTC

1. Check DTC.
2. Perform the following procedure if DTC is detected.
 - Record DTC and freeze frame data (Print them out using CONSULT.)
 - Erase DTC.
 - Study the relationship between the cause detected by DTC and the symptom described by the customer.
3. Check related service bulletins for information.

Are any symptoms described and any DTC detected?

Symptom is described, DTC is detected>>GO TO 3.

Symptom is described, DTC is not detected>>GO TO 4.

Symptom is not described, DTC is detected>>GO TO 5.

3. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Also study the normal operation and fail-safe related to the symptom.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 5.

4. CONFIRM THE SYMPTOM

Try to confirm the symptom described by the customer.

Verify relation between the symptom and the condition when the symptom is detected.

>> GO TO 6.

5. PERFORM DTC CONFIRMATION PROCEDURE

Perform DTC CONFIRMATION PROCEDURE for the detected DTC, and then check that DTC is detected again. At this time, always connect CONSULT to the vehicle, and check self diagnostic results in real time. If two or more DTCs are detected, refer to DTC INSPECTION PRIORITY CHART, and determine trouble diagnosis order.

NOTE:

- Freeze frame data is useful if the DTC is not detected.
- Perform Component Function Check if DTC CONFIRMATION PROCEDURE is not included on Service Manual. This simplified check procedure is an effective alternative though DTC cannot be detected during this check.
If the result of Component Function Check is NG, it is the same as the detection of DTC by DTC CONFIRMATION PROCEDURE.

Is DTC detected?

YES >> GO TO 7.

NO >> Check according to [GI-41. "Intermittent Incident"](#).

6. DETECT MALFUNCTIONING SYSTEM BY SYMPTOM DIAGNOSIS

Detect malfunctioning system according to SYMPTOM DIAGNOSIS based on the confirmed symptom in step 4, and determine the trouble diagnosis order based on possible causes and symptom.

Is the symptom described?

YES >> GO TO 7.

NO >> Monitor input data from related sensors or check voltage of related module terminals using CONSULT.

7. DETECT MALFUNCTIONING PART BY DIAGNOSIS PROCEDURE

DIAGNOSIS AND REPAIR WORK FLOW

< BASIC INSPECTION >

Inspect according to Diagnosis Procedure of the system.

Is malfunctioning part detected?

YES >> GO TO 8.

NO >> Check according to [GI-41. "Intermittent Incident"](#).

8. REPAIR OR REPLACE THE MALFUNCTIONING PART

1. Repair or replace the malfunctioning part.
2. Reconnect parts or connectors disconnected during Diagnosis Procedure again after repair and replacement.
3. Check DTC. If DTC is detected, erase it.

>> GO TO 9.

9. FINAL CHECK

When DTC is detected in step 2, perform DTC CONFIRMATION PROCEDURE again, and then check that the malfunction is repaired securely.

When symptom is described by the customer, refer to confirmed symptom in step 3 or 4, and check that the symptom is not detected.

Is DTC detected and does symptom remain?

YES-1 >> DTC is detected: GO TO 7.

YES-2 >> Symptom remains: GO TO 4.

NO >> Before returning the vehicle to the customer, always erase DTC.

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

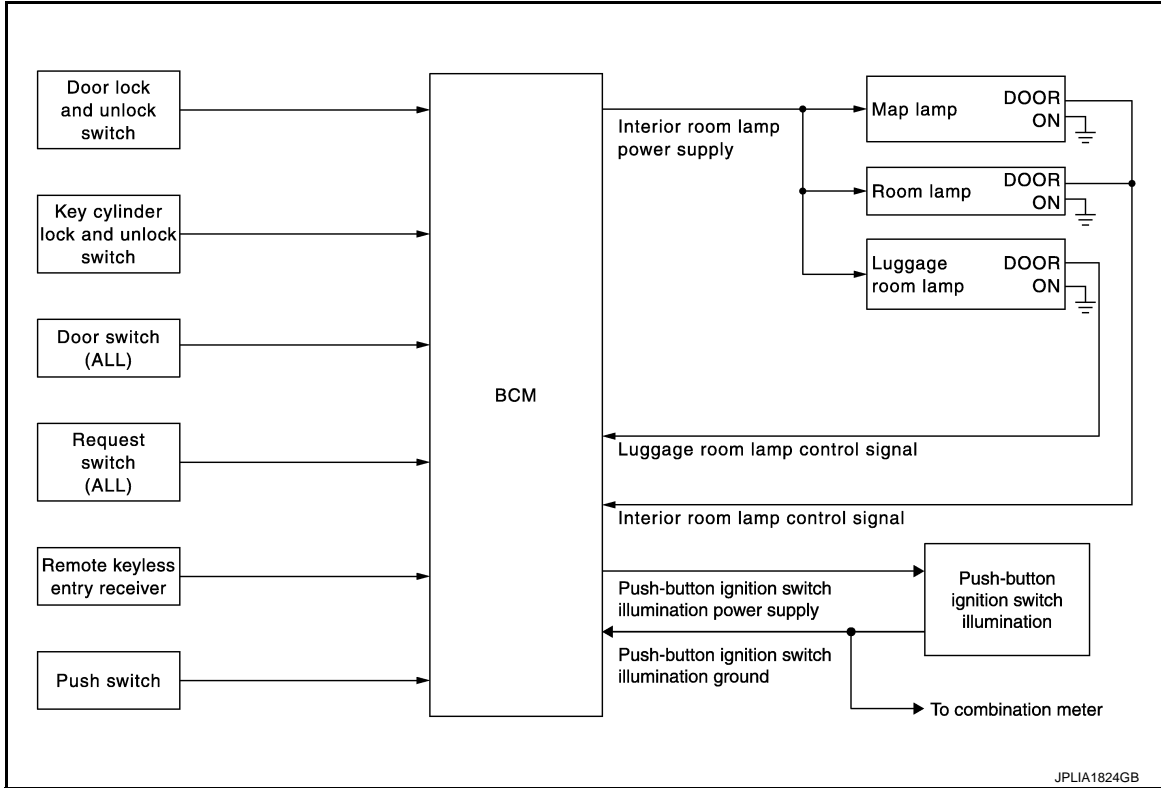
SYSTEM DESCRIPTION

INTERIOR ROOM LAMP CONTROL SYSTEM

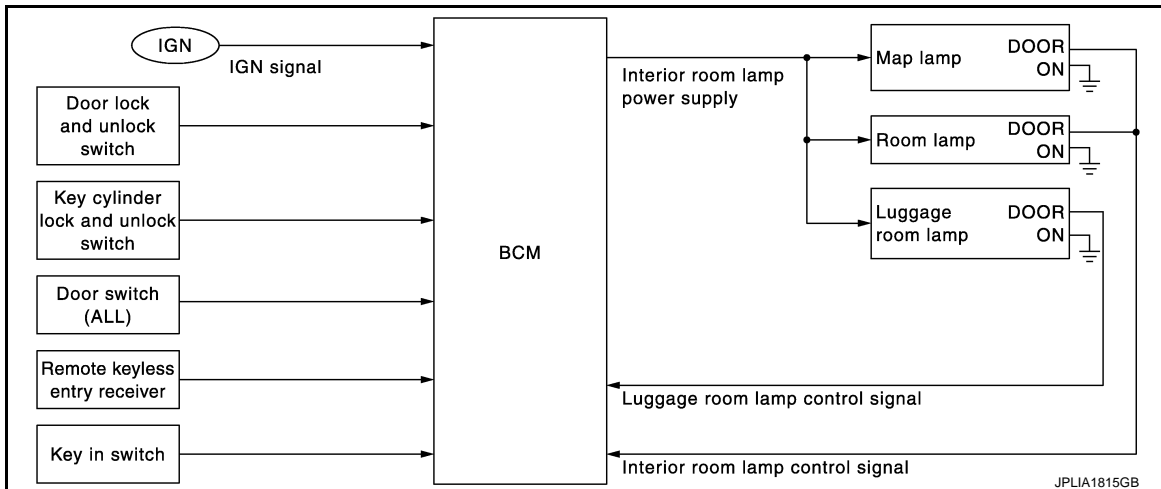
System Diagram

INFOID:000000008452501

WITH INTELLIGENT KEY



WITHOUT INTELLIGENT KEY



System Description

INFOID:000000008452502

OUTLINE

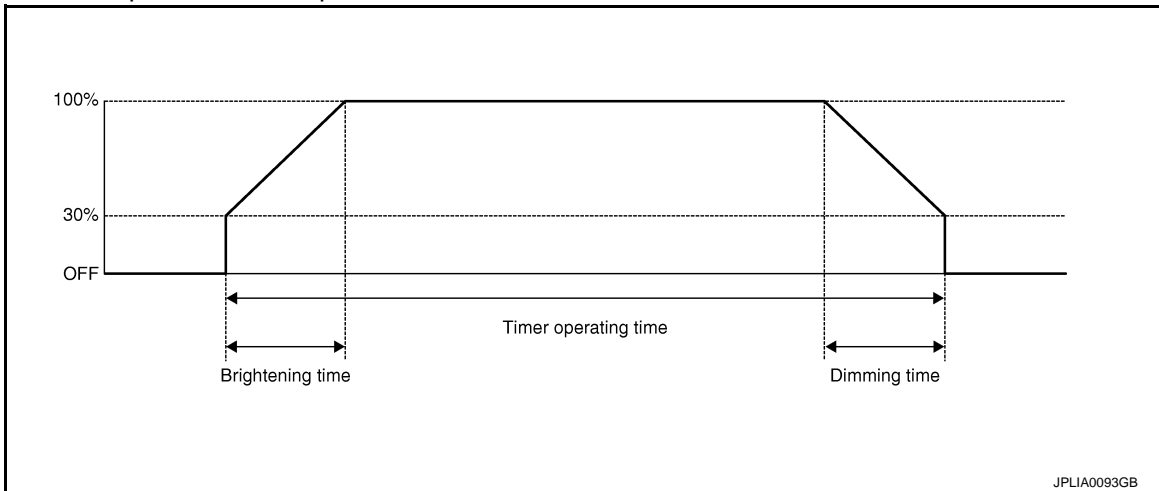
- Interior room lamps* are controlled by interior room lamp timer control function of BCM.
*: Map lamp and room lamp (when applicable lamp switch is in DOOR position).
- Luggage room lamp is controlled by luggage room lamp control function of BCM.
- Push-button ignition switch illumination is controlled by the push-button ignition switch illumination control function of BCM.

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

INTERIOR ROOM LAMP TIMER CONTROL

Interior Room Lamp Timer Basic Operation



- The interior room lamp turns ON and OFF (gradual brightening and dimming) by the interior room timer.
- BCM judges the vehicle condition with the following items. It activates the interior room lamp timer.
 - Ignition switch status
 - Door switch signal (ALL)
 - Door lock/unlock signal (Remote keyless entry receiver, each request switch^{*1}, door lock and unlock switch, key cylinder lock and unlock switch)
 - Key switch signal^{*2}
 - Push switch signal^{*1}

NOTE:

Each function of interior room lamp timer can be set by CONSULT. Refer to [INL-15, "INT LAMP : CONSULT Function \(BCM - INT LAMP\)"](#).

Interior Room Lamp ON Operation

- BCM always turns the interior room lamp ON when any door opens (back door include).
- BCM activates the interior room timer in any of the following conditions to turn the interior room lamp ON for a period of time.
 - Any door opens before all doors close.
 - Key switch is turned ON → OFF^{*2}.
 - Any door unlock signal is detected when all doors close with ignition switch OFF.
 - Push switch is turned ON → OFF^{*1}.

NOTE:

Restart the timer if new condition is input during the timer operating time.

Interior Room Lamp OFF Operation

BCM stops the timer in any of the following conditions to turns the interior room lamp OFF.

- The timer operating time is expired.
- Ignition switch position is ON with all doors close.
- All door lock operation is detected with all doors close.

*1:With Intelligent Key

*2:Without Intelligent Key

LUGGAGE ROOM LAMP CONTROL

BCM controls the luggage room lamp (ground-side) to turn ON with the luggage room lamp switch ON.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CONTROL (WITH INTELLIGENT KEY)

Push-button Ignition Switch Illumination Basic Operation

- BCM provides the power supply and the ground to turn the push-button ignition switch illumination ON.
- BCM cuts the ground supply while the each illumination (tail lamp) ON. BCM switches to the ground control with the meter illumination control function.

Push-button Ignition Switch Illumination ON Operation

BCM turns the push-button ignition switch illumination ON in the following conditions.

- Ignition switch ON

INTERIOR ROOM LAMP CONTROL SYSTEM

< SYSTEM DESCRIPTION >

- Each illumination (tail lamp) ON
- Any of the following conditions with ignition switch OFF
 - Engine start permission is entered.
 - Driver door is LOCK → UNLOCK.
 - Driver door is open.

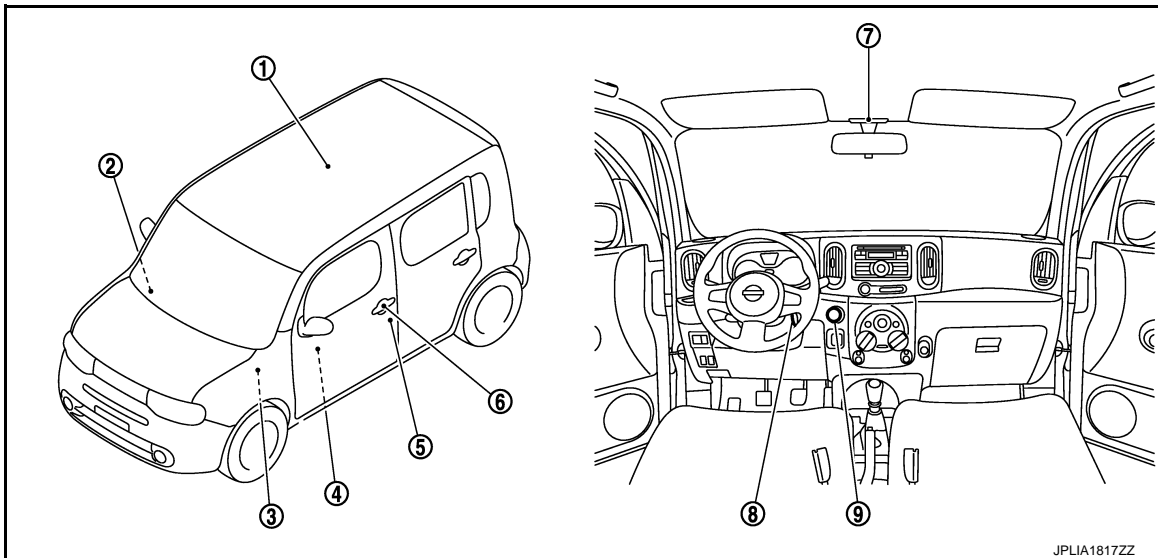
Push-button Ignition Switch Illumination OFF Operation

BCM turns the push-button ignition switch illumination OFF in any of the following conditions.

- The push-button ignition switch illumination ON conditions do not satisfy.
- All of the following conditions with ignition switch OFF.
 - Each illumination (tail lamp) OFF
 - The push-button ignition switch illumination ON conditions do not change (15 seconds after the ignition switch OFF) or the driver door is UNLOCK → LOCK

Component Parts Location

INFOID:000000008452503



- | | | |
|--------------------------------|---|--|
| 1. Room lamp | 2. Remote keyless entry receiver
Refer to DLK-15 ,
"Component Parts Location" . | 3. BCM
Refer to BCS-10 , "Component Parts Location" . |
| 4. Door lock and unlock switch | 5. Door switch | 6. Request switch |
| 7. Map lamp | 8. Key switch
(Without Intelligent Key) | 9. Push switch
(With Intelligent Key) |

Component Description

INFOID:000000008452504

Part	Description
BCM	Activates the interior room lamp timer depending on the vehicle condition to turn the interior room lamps ON/OFF.
Remote keyless entry receiver	Receives the lock/unlock signal from Keyfob.
<ul style="list-style-type: none"> • Door lock and unlock switch • Key cylinder lock and unlock switch • Request switch*¹ 	Inputs the lock/unlock signal to BCM.
Door switch	Inputs the door switch signal to BCM.
<ul style="list-style-type: none"> • Key in switch*² • Push switch*¹ 	Inputs the key switch signal to BCM.

*1:With Intelligent Key

*2:Without Intelligent Key

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

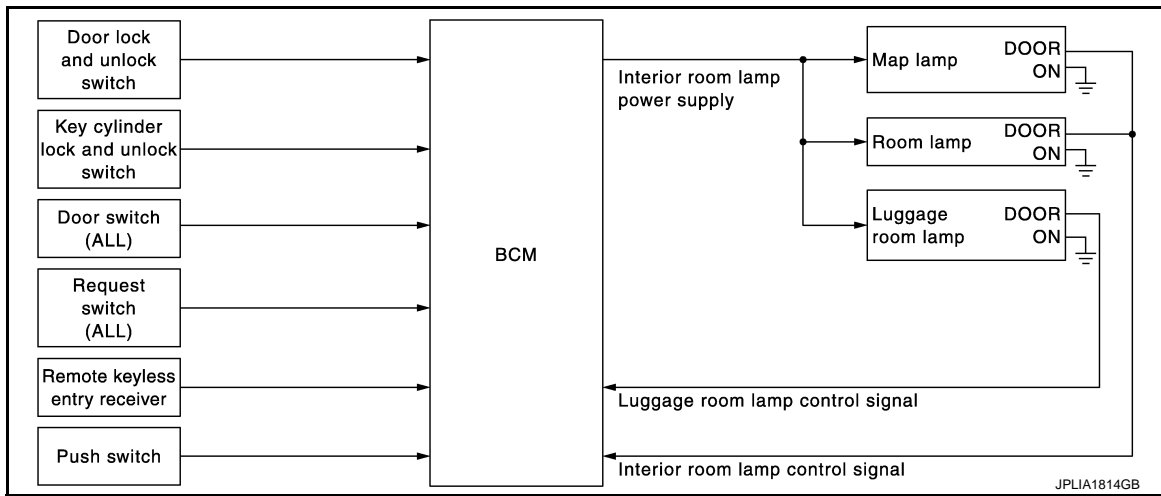
< SYSTEM DESCRIPTION >

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

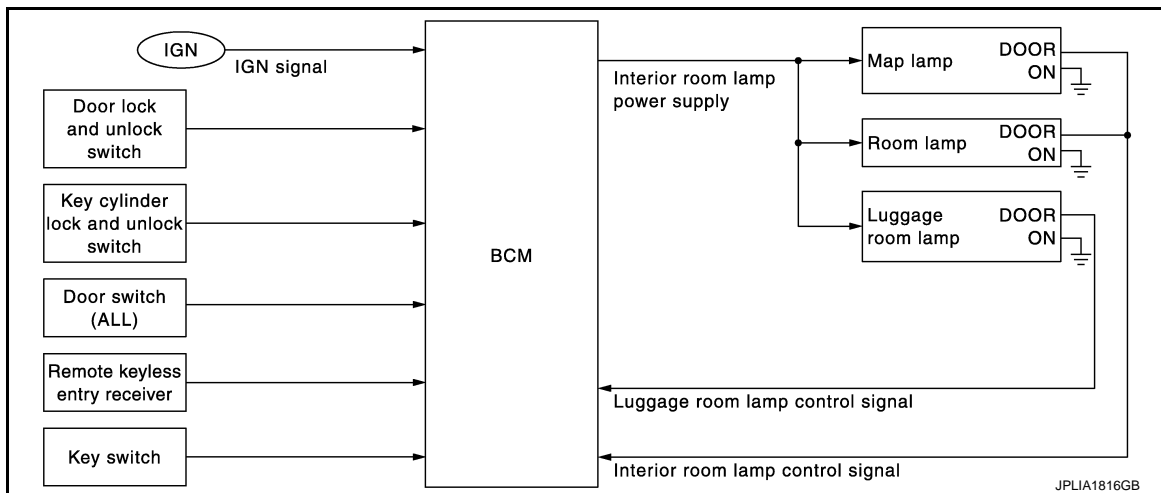
System Diagram

INFOID:000000008452505

WITH INTELLIGENT KEY



WITHOUT INTELLIGENT KEY



System Description

INFOID:000000008452506

OUTLINE

- Interior room lamp battery saver is controlled by BCM.
- BCM turns applicable lamps OFF depending on the vehicle condition. This function prevents the battery from over-discharging if the driver neglect turning OFF the any lamps.

Applicable lamps

- Map lamp
- Room lamp
- Luggage room lamp

INTERIOR ROOM LAMP BATTERY SAVER FUNCTION

- When the ignition switch is turned OFF, BCM operates the timer for a period of time to cut the interior room lamp power supply.
- BCM restart the timer when any of the following signals changes while operating the timer.
 - Ignition switch status
 - Door switch signal (ALL)
 - Door lock/unlock signal (Remote keyless entry receiver, each request switch^{*1}, door lock and unlock switch, key cylinder lock and unlock switch)
 - Key switch signal^{*2}

A
B
C
D
E
F
G
H
I
J
K

INL

INTERIOR ROOM LAMP BATTERY SAVER SYSTEM

< SYSTEM DESCRIPTION >

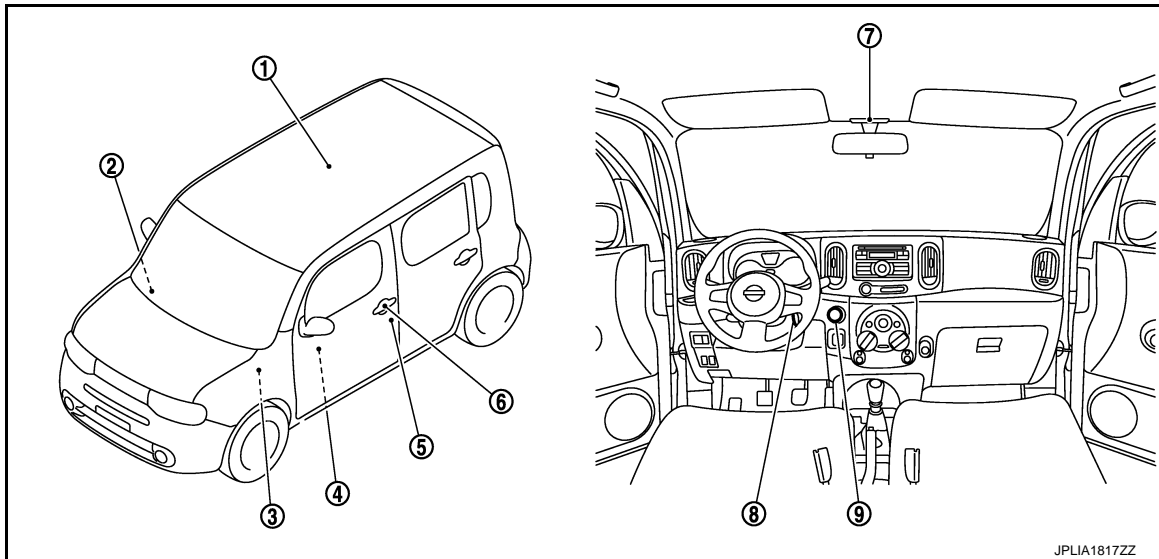
- Push switch*1
 - BCM provides the interior room lamp power supply continuously when the ignition switch position is ON.
- *1:With Intelligent Key
*2:Without Intelligent Key

NOTE:

Each function of interior room lamp battery saver can be set by CONSULT. Refer to [INL-16. "BATTERY SAVER : CONSULT Function \(BCM - BATTERY SAVER\)"](#).

Component Parts Location

INFOID:000000008452507



JPLIA1817ZZ

- | | | |
|--------------------------------|---|---|
| 1. Room lamp | 2. Remote keyless entry receiver
Refer to DLK-15. "Component Parts Location" . | 3. BCM
Refer to BCS-10. "Component Parts Location" . |
| 4. Door lock and unlock switch | 5. Door switch | 6. Request switch |
| 7. Map lamp | 8. Key switch (Without Intelligent Key) | 9. Push switch (With Intelligent Key) |

Component Description

INFOID:000000008452508

Part	Description
BCM	Operates the interior room lamp battery saver depending on the vehicle condition to cut the interior room lamp power supply.
Remote keyless entry receiver	Receives the lock/unlock signal from keyfob.
<ul style="list-style-type: none"> • Door lock and unlock switch • Key cylinder lock and unlock switch • Request switch*1 	Inputs the lock/unlock signal to BCM.
Door switch	Inputs the door switch signal to BCM.
<ul style="list-style-type: none"> • Push switch*1 • Key switch*2 	Inputs the key switch signal to BCM.

*1:With Intelligent Key

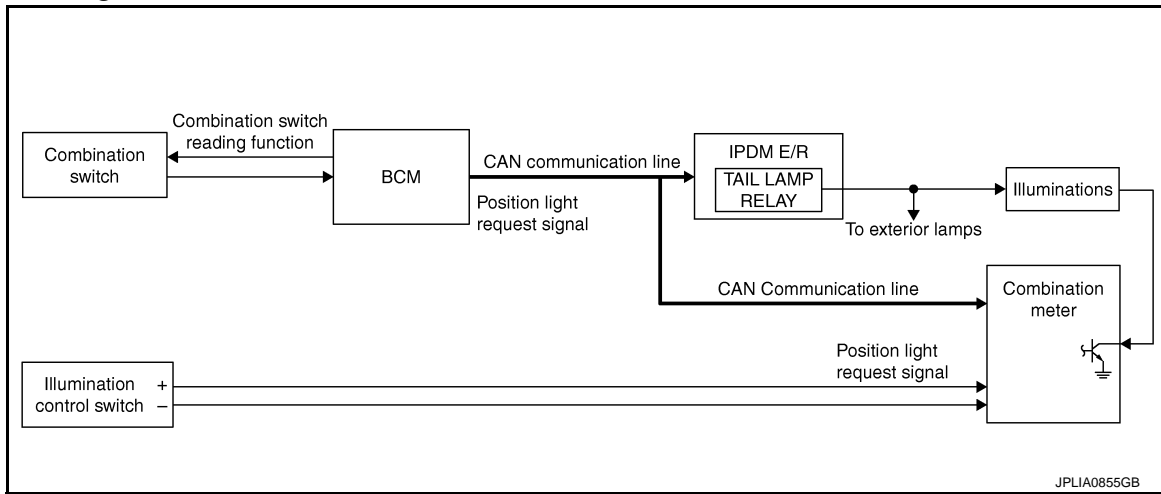
*2:Without Intelligent Key

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

ILLUMINATION CONTROL SYSTEM

System Diagram



System Description

INFOID:000000008452510

OUTLINE

Each illumination lamp is controlled by each function of BCM and IPDM E/R.

Control by BCM

- Combination switch reading function
- Headlamp control function

Control by IPDM E/R

- Relay control function

ILLUMINATION CONTROL

- BCM detects the combination switch condition by the combination switch reading function.
- BCM transmits position light request signal to IPDM E/R and combination meter according to tail lamp ON condition.

Tail lamp ON condition

- Lighting switch 1ST
- Lighting switch 2ND
- Lighting switch AUTO, and the auto light function ON judgment (With auto light system)
- IPDM E/R turns the integrated tail lamp relay ON according to position light request signal. It provides the power supply to each illumination lamp.
- Combination meter illuminates the meter illumination according to position light request signal.

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

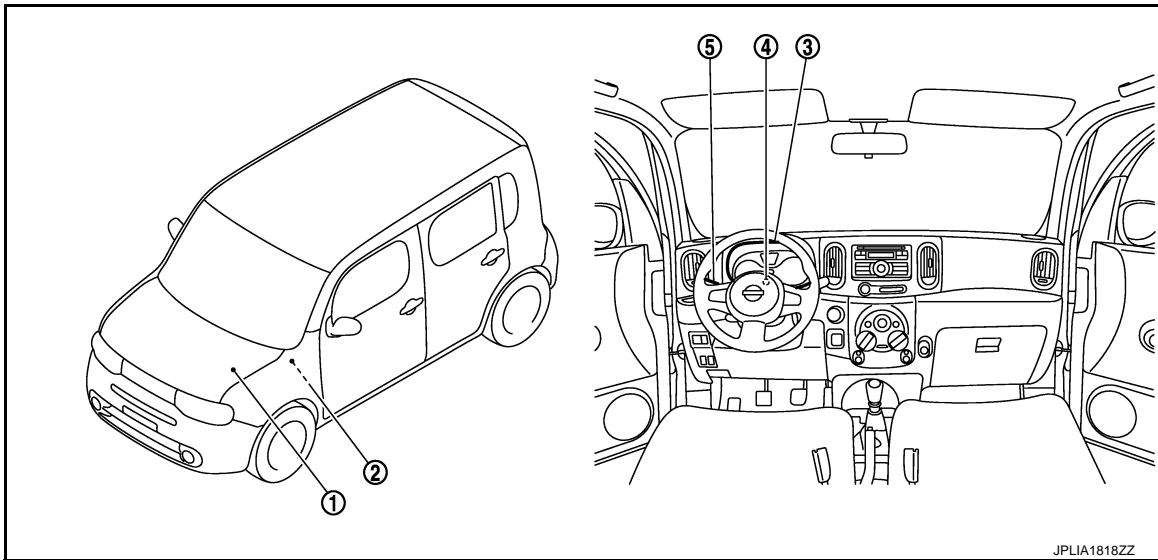
INL

ILLUMINATION CONTROL SYSTEM

< SYSTEM DESCRIPTION >

Component Parts Location

INFOID:000000008452511



- | | | |
|--|---|-----------------------------|
| <p>1. IPDM E/R
Refer to PCS-6, "Component Parts Location".</p> <p>4. Illumination control switch</p> | <p>2. BCM
Refer to BCS-10, "Component Parts Location".</p> <p>5. Combination switch</p> | <p>3. Combination meter</p> |
|--|---|-----------------------------|

Component Description

INFOID:000000008452512

Part	Description
BCM	<ul style="list-style-type: none"> • Detects each switch condition by the combination switch reading function. • Judges the illumination lamp ON/OFF status depending on the vehicle condition. And then it transmits position light request signal to IPDM E/R and combination meter (with CAN communication).
IPDM E/R	Controls the integrated relay according to the request signal from BCM (with CAN communication).
Combination meter	Illuminates the meter illumination according to the request signal from BCM (with CAN communication).
Combination switch (Lighting & turn signal switch)	Refer to BCS-11, "System Diagram" .

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:0000000008894586

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> Read and save the vehicle specification. Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp timer	INT LAMP	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER	×	×	×
<ul style="list-style-type: none"> Automatic air conditioner Manual air conditioner 	AIR CONDITONER		×	×*
<ul style="list-style-type: none"> Intelligent Key system Engine start system 	INTELLIGENT KEY	×	×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×

*: For models with automatic air conditioner, this model is not used.

FREEZE FRAME DATA (FFD)

The BCM records the following vehicle condition at the time a particular DTC is detected, and displays on CONSULT.

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

CONSULT screen item	Indication/Unit	Description	
Vehicle Speed	km/h	Vehicle speed of the moment a particular DTC is detected	
Odo/Trip Meter	km	Total mileage (Odometer value) of the moment a particular DTC is detected	
Vehicle Condition	SLEEP>LOCK	Power position status of the moment a particular DTC is detected	While turning BCM status from low power consumption mode to normal mode (Power supply position is "LOCK"*)
	SLEEP>OFF		While turning BCM status from low power consumption mode to normal mode (Power supply position is "OFF".)
	LOCK>ACC		While turning power supply position from "LOCK"* to "ACC"
	ACC>ON		While turning power supply position from "ACC" to "IGN"
	RUN>ACC		While turning power supply position from "RUN" to "ACC" (Vehicle is stopping and selector lever is except P position.)
	CRANK>RUN		While turning power supply position from "CRANKING" to "RUN" (From cranking up the engine to run it)
	RUN>URGENT		While turning power supply position from "RUN" to "ACC" (Emergency stop operation)
	ACC>OFF		While turning power supply position from "ACC" to "OFF"
	OFF>LOCK		While turning power supply position from "OFF" to "LOCK"*
	OFF>ACC		While turning power supply position from "OFF" to "ACC"
	ON>CRANK		While turning power supply position from "IGN" to "CRANKING"
	OFF>SLEEP		While turning BCM status from normal mode (Power supply position is "OFF".) to low power consumption mode
	LOCK>SLEEP		While turning BCM status from normal mode (Power supply position is "LOCK"*) to low power consumption mode
	LOCK		Power supply position is "LOCK"*
	OFF		Power supply position is "OFF" (Ignition switch OFF)
	ACC		Power supply position is "ACC" (Ignition switch ACC)
	ON		Power supply position is "IGN" (Ignition switch ON with engine stopped)
	ENGINE RUN		Power supply position is "RUN" (Ignition switch ON with engine running)
CRANKING	Power supply position is "CRANKING" (At engine cranking)		
IGN Counter	0 - 39	The number of times that ignition switch is turned ON after DTC is detected <ul style="list-style-type: none"> • The number is 0 when a malfunction is detected now. • The number increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. • The number is fixed to 39 until the self-diagnosis results are erased if it is over 39. 	

NOTE:

*: Power position shifts to "LOCK" from "OFF", when ignition switch is in the OFF position, selector lever is in the P position (CVT models), and any of the following conditions are met.

- Closing door
- Opening door
- Door is locked using door request switch
- Door is locked using Intelligent Key

The power position shifts to "ACC" when the push-button ignition switch (push switch) is pushed at "LOCK".

INT LAMP

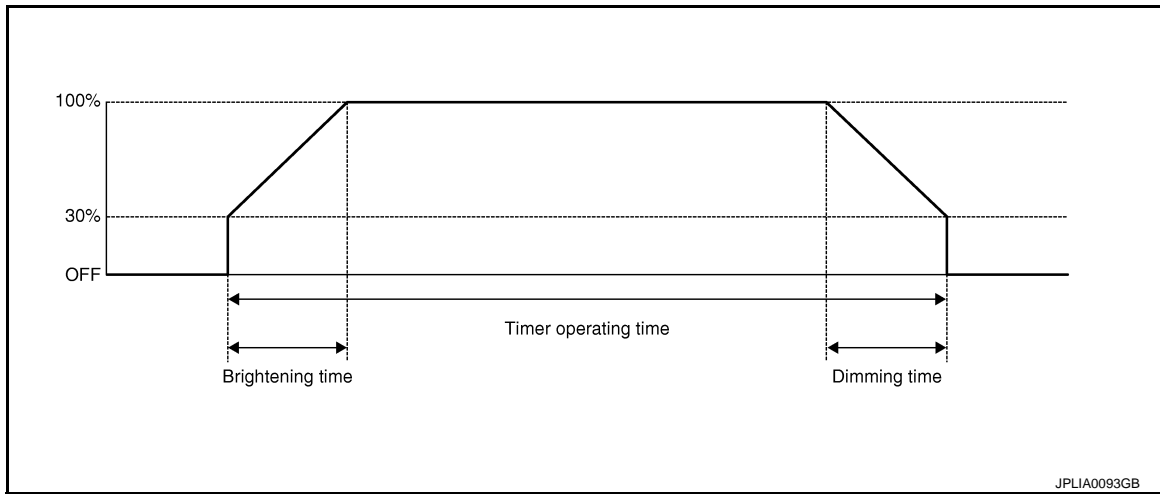
DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000008452514

WORK SUPPORT



Service item	Setting item	Setting
ROOM LAMP TIMER SET	MODE 2	7.5 sec.
	MODE 3*	15 sec.
	MODE 4	30 sec.
		Sets the interior room lamp ON time. (Timer operating time)
SET I/L D-UNLCK INTCON	On*	With the interior room lamp timer function
	Off	Without the interior room lamp timer function
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.
	MODE 2*	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	0 sec.
		Sets the interior room lamp gradual brightening time.
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.
	MODE 2*	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	0 sec.
		Sets the interior room lamp gradual dimming time.
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.
	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.

*: Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal.
	Off	Stops the interior room lamp control signal.

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:000000008452515

WORK SUPPORT

Service item	Setting item	Setting
ROOM LAMP TIMER SET	MODE 1	30 min.
	MODE 2	60 min.
	MODE 3*	15 min.
BATTERY SAVER SET	On*	With the exterior lamp battery saver function
	Off	Without the exterior lamp battery saver function
ROOM LAMP BAT SAV SET	On*	With the interior room lamp battery saver function
	Off	Without the interior room lamp battery saver function

DIAGNOSIS SYSTEM (BCM) (WITH INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

*:Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Unit]	Description
REQ SW-DR [On/Off]	Indicated [On/Off] condition of door request switch (driver side)
REQ SW-AS [On/Off]	Indicated [On/Off] condition of door request switch (passenger side)
REQ SW-RR [On/Off]	NOTE: This item is displayed, but cannot be monitored
REQ SW-RL [On/Off]	NOTE: This item is displayed, but cannot be monitored
PUSH SW [On/Off]	Indicates [On/Off] condition of push-button ignition switch
UNLK SEN -DR [On/Off]	Indicates [On/Off] condition of driver door UNLOCK status
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
DOOR SW- BK [On/Off]	Indicated [On/Off] condition of back door switch
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be monitored
RKE-LOCK [On/Off]	Indicates [On/Off] condition of LOCK signal from Intelligent Key
RKE-UNLOCK [On/Off]	Indicates [On/Off] condition of UNLOCK signal from Intelligent Key

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply.
	On	Outputs the interior room lamp power supply.

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM) COMMON ITEM

COMMON ITEM : CONSULT Function (BCM - COMMON ITEM)

INFOID:000000008894587

APPLICATION ITEM

CONSULT performs the following functions via CAN communication with BCM.

Diagnosis mode	Function Description
Work Support	Changes the setting for each system function.
Self Diagnostic Result	Displays the diagnosis results judged by BCM.
CAN Diag Support Monitor	Monitors the reception status of CAN communication viewed from BCM.
Data Monitor	The BCM input/output signals are displayed.
Active Test	The signals used to activate each device are forcibly supplied from BCM.
Ecu Identification	The BCM part number is displayed.
Configuration	<ul style="list-style-type: none"> • Read and save the vehicle specification. • Write the vehicle specification when replacing BCM.

SYSTEM APPLICATION

BCM can perform the following functions for each system.

NOTE:

It can perform the diagnosis modes except the following for all sub system selection items.

×: Applicable item

System	Sub system selection item	Diagnosis mode		
		Work Support	Data Monitor	Active Test
Door lock	DOOR LOCK	×	×	×
Rear window defogger	REAR DEFOGGER		×	×
Warning chime	BUZZER		×	×
Interior room lamp control	INT LAMP	×	×	×
Remote keyless entry system	MULTI REMOTE ENT	×	×	×
Exterior lamp	HEAD LAMP	×	×	×
Wiper and washer	WIPER	×	×	×
Turn signal and hazard warning lamps	FLASHER		×	×
Manual air conditioner	AIR CONDITONER		×	×
Combination switch	COMB SW		×	
Body control system	BCM	×		
NVIS - NATS	IMMU	×	×	×
Interior room lamp battery saver	BATTERY SAVER	×	×	×
Back door	TRUNK		×	
Vehicle security system	THEFT ALM	×	×	×
RAP system	RETAINED PWR		×	×
Signal buffer system	SIGNAL BUFFER		×	×
TPMS	TPMS (AIR PRESSURE MONITOR)	×	×	×
Panic alarm system	PANIC ALARM			×

INT LAMP

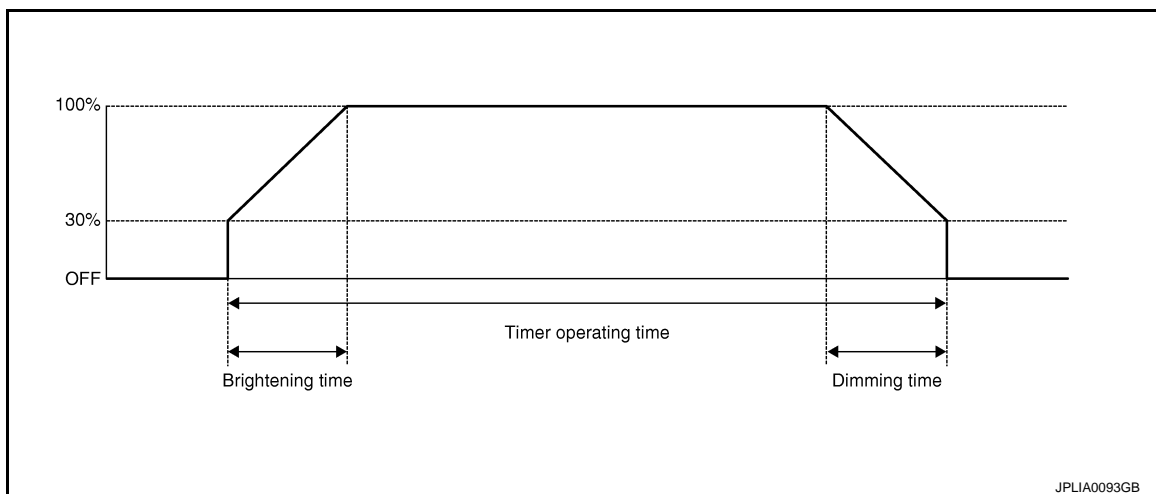
DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

INT LAMP : CONSULT Function (BCM - INT LAMP)

INFOID:000000008452517

WORK SUPPORT



Service item	Setting item	Setting
ROOM LAMP TIMER SET	MODE 1*	0 sec.
	MODE 2	7.5 sec.
	MODE 3	15 sec.
	MODE 4	30 sec.
		Sets the interior room lamp ON time. (Timer operating time)
SET I/L D-UNLCK INTCON	On*	With the interior room lamp timer function
	Off	Without the interior room lamp timer function
ROOM LAMP ON TIME SET	MODE 1	0.5 sec.
	MODE 2*	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	4 sec.
	MODE 6	5 sec.
	MODE 7	0 sec.
		Sets the interior room lamp gradual brightening time.
ROOM LAMP OFF TIME SET	MODE 1	0.5 sec.
	MODE 2*	1 sec.
	MODE 3	2 sec.
	MODE 4	3 sec.
	MODE 5	4 sec.
	MODE 6	5 sec.
	MODE 7	0 sec.
		Sets the interior room lamp gradual dimming time.
R LAMP TIMER LOGIC SET	MODE 1*	Interior room lamp timer activates with synchronizing all doors.
	MODE 2	Interior room lamp timer activates with synchronizing the driver door only.

*: Factory setting

DATA MONITOR

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

Monitor item [Unit]	Description
IGN ON SW [On/Off]	Indicated [On/Off] condition of ignition switch in ON position
ACC ON SW [On/Off]	Indicated [On/Off] condition of ignition switch in ACC position
KEY ON SW [On/Off]	Indicated [On/Off] condition of key switch
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
BACK DOOR SW [On/Off]	Indicated [On/Off] condition of back door switch
LOCK STATUS [On/Off]	Indicated [On/Off] condition of driver side door
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEYLESS LOCK [On/Off]	Indicates [On/Off] condition of lock signal from keyfob
KEYLESS UNLOCK [On/Off]	Indicates [On/Off] condition of unlock signal from keyfob
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be tested

ACTIVE TEST

Test item	Operation	Description
INT LAMP	On	Outputs the interior room lamp control signal.
	Off	Stops the interior room lamp control signal.

BATTERY SAVER

BATTERY SAVER : CONSULT Function (BCM - BATTERY SAVER)

INFOID:000000008452518

WORK SUPPORT

Service item	Setting item	Setting	
ROOM LAMP TIMER SET	MODE 1	30 min.	Sets the interior room lamp battery saver timer operating time.
	MODE 2	60 min.	
	MODE 3*	15 min.	

*:Factory setting

DATA MONITOR

DIAGNOSIS SYSTEM (BCM) (WITHOUT INTELLIGENT KEY SYSTEM)

< SYSTEM DESCRIPTION >

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor item [Unit]	Description
IGN ON SW [On/Off]	Indicated [On/Off] condition of ignition switch in ON position
ACC ON SW [On/Off]	Indicated [On/Off] condition of ignition switch in ACC position
KEY ON SW [On/Off]	Indicated [On/Off] condition of key switch
DOOR SW-DR [On/Off]	Indicated [On/Off] condition of front door switch (driver side)
DOOR SW-AS [On/Off]	Indicated [On/Off] condition of front door switch (passenger side)
DOOR SW-RR [On/Off]	Indicated [On/Off] condition of rear door switch RH
DOOR SW- RL [On/Off]	Indicated [On/Off] condition of rear door switch LH
BACK DOOR SW [On/Off]	Indicated [On/Off] condition of back door switch
LOCK STATUS [On/Off]	Indicated [On/Off] condition of driver side door
CDL LOCK SW [On/Off]	Indicated [On/Off] condition of lock signal from door lock unlock switch
CDL UNLOCK SW [On/Off]	Indicated [On/Off] condition of unlock signal from door lock unlock switch
KEYLESS LOCK [On/Off]	Indicates [On/Off] condition of lock signal from keyfob
KEYLESS UNLOCK [On/Off]	Indicates [On/Off] condition of unlock signal from keyfob
KEY CYL LK-SW [On/Off]	Indicated [On/Off] condition of lock signal from door key cylinder
KEY CYL UN-SW [On/Off]	Indicated [On/Off] condition of unlock signal from door key cylinder
TRNK/HAT MNTR [On/Off]	NOTE: This item is displayed, but cannot be tested

ACTIVE TEST

Test item	Operation	Description
BATTERY SAVER	Off	Cuts the interior room lamp power supply.
	On	Outputs the interior room lamp power supply.

A
B
C
D
E
F
G
H
I
J
K
INL
M
N
O
P

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

DTC/CIRCUIT DIAGNOSIS

POWER SUPPLY AND GROUND CIRCUIT

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITH INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:000000008894588

1. CHECK FUSE AND FUSIBLE LINK

Check that the following fuse and fusible link are not blown.

Signal name	Fuse and fusible link No.
Battery power supply	G
	8

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2. CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM harness connector and ground.

Terminals		Voltage (Approx.)
(+)	(-)	
BCM		Ground Battery voltage
Connector	Terminal	
M70	70	
	57	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3. CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70	67		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM)

BCM (BODY CONTROL SYSTEM) (WITHOUT INTELLIGENT KEY SYSTEM) : Diagnosis Procedure

INFOID:000000008894589

1. CHECK FUSES AND FUSIBLE LINK

Check that the following fuses and fusible link are not fusing.

POWER SUPPLY AND GROUND CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Signal name	Fuses and fusible link No.
Battery power supply	8
	G
ACC power supply	20
Ignition power supply	2

Is the fuse fusing?

YES >> Replace the blown fuse or fusible link after repairing the affected circuit if a fuse or fusible link is blown.

NO >> GO TO 2.

2.CHECK POWER SUPPLY CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connectors.
3. Check voltage between BCM harness connector and ground.

Terminals		(-)	Ignition switch position		
(+)			OFF	ACC	ON
BCM		Ground	OFF	ACC	ON
Connector	Terminal				
M67	70		Battery voltage	Battery voltage	Battery voltage
	57				
M65	11	Approx. 0 V	Battery voltage	Battery voltage	
	38	Approx. 0 V	Approx. 0 V	Battery voltage	

Is the measurement value normal?

YES >> GO TO 3.

NO >> Repair harness or connector.

3.CHECK GROUND CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M67	67		Existed

Does continuity exist?

YES >> INSPECTION END

NO >> Repair harness or connector.

A
B
C
D
E
F
G
H
I
J
K
INL
M
N
O
P

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

Description

INFOID:000000008452521

Provides the interior room lamp power supply. Also cuts the power supply when the interior room lamp battery saver activating.

Component Function Check

INFOID:000000008452522

1. CHECK INTERIOR ROOM LAMP POWER SUPPLY FUNCTION

Ⓟ CONSULT ACTIVE TEST

1. Turn ignition switch ON.
2. Turn each interior room lamp ON.
 - Map lamp
 - Room lamp
 - Luggage room lamp
3. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
4. With operating the test items, check that each interior room lamp is turned ON/OFF.

Off : Interior room lamp OFF

On : Interior room lamp ON

Is the interior room lamp turned ON/OFF?

- YES >> Interior room lamp power supply circuit is normal.
NO >> Refer to [INL-24, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000008452523

1. CHECK INTERIOR ROOM LAMP POWER SUPPLY OUTPUT

Ⓟ CONSULT ACTIVE TEST

1. Turn ignition switch ON.
2. Select "BATTERY SAVER" of BCM (BATTERY SAVER) active test item.
3. With operating the test item, check voltage between BCM harness connector and ground.

Terminals		Test item	Voltage (Approx.)
(+)	(-)		
BCM		BATTERY SAVER	0 V
Connector	Terminal		
M70*1 M67*2	56	Off	Battery voltage

*1: With Intelligent Key

*2: Without Intelligent Key

Is the measurement value normal?

- YES >> GO TO 2.
NO >> Replace BCM. Refer to [BCS-82, "Exploded View"](#).

2. CHECK INTERIOR ROOM LAMP POWER SUPPLY OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.
 - Map lamp
 - Room lamp
 - Luggage room lamp
3. Check continuity between BCM harness connector and each interior room lamp harness connector.

INTERIOR ROOM LAMP POWER SUPPLY CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

BCM		Each interior room lamp			Continuity
Connector	Terminal	Connector		Terminal	
M70*1 M67*2	56	Map lamp	R4	4	Existed
		Room lamp	R6	1	
		Luggage room lamp	B11	1	

*1: With Intelligent Key

*2: Without Intelligent Key

Does continuity exist?

YES >> GO TO 3.

NO >> Repair the harnesses or connectors.

3. CHECK INTERIOR ROOM LAMP POWER SUPPLY SHORT CIRCUIT

Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70*1 M67*2	56		Not existed

*1: With Intelligent Key

*2: Without Intelligent Key

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Check that each interior room lamp has no internal short circuit.

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL CIRCUIT

Description

INFOID:000000008452524

Controls each interior room lamp (ground side) by PWM signal.

NOTE:

PWM signal control period is approximately 250 Hz (in the gradual brightening/dimming).

Component Function Check

INFOID:000000008452525

CAUTION:

Before the diagnosis, check that the following items are normal.

- Interior room lamp power supply
- Map lamp bulb
- Room lamp bulb

1. CHECK INTERIOR ROOM LAMP CONTROL FUNCTION

ⓐ CONSULT ACTIVE TEST

1. Switch the map lamp switch to DOOR.
2. Turn ignition switch ON.
3. Select "INT LAMP" of BCM (INT LAMP) active test item.
4. With operating the test items, check that each interior room lamp turns ON/OFF (gradual brightening/dimming).

On : Interior room lamp gradual brightening

Off : Interior room lamp gradual dimming

Does the interior room lamp turns ON/OFF (gradual brightening/dimming)?

YES >> Interior room lamp control circuit is normal.

NO >> Refer to [INL-26, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000008452526

1. CHECK INTERIOR ROOM LAMP CONTROL OUTPUT

ⓐ CONSULT ACTIVE TEST

1. Turn ignition switch OFF.
2. Remove all the bulbs of following lamps.
 - Map lamp
 - Room lamp
3. Select "INT LAMP" of BCM (INT LAMP) active test item.
4. With operating the test item, check continuity between BCM harness connector and ground.

BCM		Ground	Test item	Continuity
Connector	Terminal		INT LAMP	
M70*1	63		On	Existed
M67*2			Off	Not existed

*1: With Intelligent Key

*2: Without Intelligent Key

Is the measurement value normal?

YES >> GO TO 2.

Fixed ON>>GO TO 3.

Fixed OFF>>Replace BCM. Refer to [BCS-82, "Exploded View"](#).

2. CHECK INTERIOR ROOM LAMP CONTROL OPEN CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect the following connectors.

INTERIOR ROOM LAMP CONTROL CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

- Map lamp
- Room lamp
- 3. Check continuity between BCM harness connector, map lamp harness connector, and room lamp harness connector.

BCM		Map lamp/room lamp			Continuity
Connector	Terminal	Connector	Terminal		
M70 ^{*1}	63	Map lamp	R4	2	Existed
M67 ^{*2}		Room lamp	R6	2	

*1: With Intelligent Key

*2: Without Intelligent Key

Does continuity exist?

YES >> Replace the map lamp or the room lamp.

NO >> Repair the harnesses or connectors.

3. CHECK INTERIOR ROOM LAMP CONTROL SHORT CIRCUIT

1. Turn ignition switch OFF.
2. Disconnect BCM connector, map lamp connector and room lamp connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M70 ^{*1}	63		Not existed
M67 ^{*2}			

*1: With Intelligent Key

*2: Without Intelligent Key

Does continuity exist?

YES >> Repair the harnesses or connectors.

NO >> Replace BCM. Refer to [BCS-82. "Exploded View"](#).

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

Description

INFOID:000000008452527

Provides the power supply and the ground to control the push-button ignition switch illumination.

Component Function Check

INFOID:000000008452528

1. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION OPERATION

CONSULT ACTIVE TEST

1. Turn the ignition switch ON.
2. Select "ENGINE SW ILLUMI" of BCM (INTELLIGENT KEY) active test item.
3. With operating the test items, check that the push-button ignition switch illumination turns ON/OFF.

On : Push-button ignition switch illumination ON

Off : Push-button ignition switch illumination OFF

Does the push-button ignition switch illumination turn ON/OFF?

- YES >> Push-button ignition switch illumination circuit is normal.
NO >> Refer to [INL-28, "Diagnosis Procedure"](#).

Diagnosis Procedure

INFOID:000000008452529

1. CHECK ILLUMINATION CONTROL SWITCHING OPERATION

1. Turn the ignition switch ON.
2. With operating the lighting switch, check that the push-button ignition switch illumination turns ON/OFF.

Condition	Push-button ignition switch illumination
<ul style="list-style-type: none">• Ignition switch ON• Lighting switch 1ST	ON
<ul style="list-style-type: none">• Ignition switch OFF• Lighting switch OFF• Driver door LOCK	OFF

Does the push-button ignition switch illumination turn ON/OFF?

- YES >> GO TO 2.
NO >> GO TO 3.

2. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION GROUND CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and the push-button ignition switch harness connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M71	92	M101	6	Existed

Does the continuity exist?

- YES >> Replace BCM.
NO >> Repair the harness or the connector.

3. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OUTPUT

CONSULT ACTIVE TEST

1. Turn the ignition switch ON.
2. Select "ENGINE SW ILLUMI" of BCM (INTELLIGENT KEY) active test item.
3. With operating the test item, check voltage between BCM harness connector and ground.

PUSH-BUTTON IGNITION SWITCH ILLUMINATION CIRCUIT

< DTC/CIRCUIT DIAGNOSIS >

Terminals		Test item	Voltage (Approx.)
(+)	(-)		
BCM		ENGINE SW ILLUMI	12 V
Connector	Terminal		
M71	90	ON	12 V
		OFF	0 V

Is the measurement value normal?

- YES >> GO TO 4.
NO >> GO TO 5.

4. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY OPEN CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and the push-button ignition switch harness connector.

BCM		Push-button ignition switch		Continuity
Connector	Terminal	Connector	Terminal	
M71	90	M101	5	Existed

Does the continuity exist?

- YES >> Replace the push-button ignition switch.
NO >> Repair the harness or the connector.

5. CHECK PUSH-BUTTON IGNITION SWITCH ILLUMINATION POWER SUPPLY SHORT CIRCUIT

1. Turn the ignition switch OFF.
2. Disconnect BCM connector and the push-button ignition switch connector.
3. Check continuity between BCM harness connector and ground.

BCM		Ground	Continuity
Connector	Terminal		
M71	90		Not existed

Does the continuity exist?

- YES >> Repair the harness or the connector.
NO >> Replace BCM.

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL


INTERIOR ROOM LAMP CONTROL SYSTEM

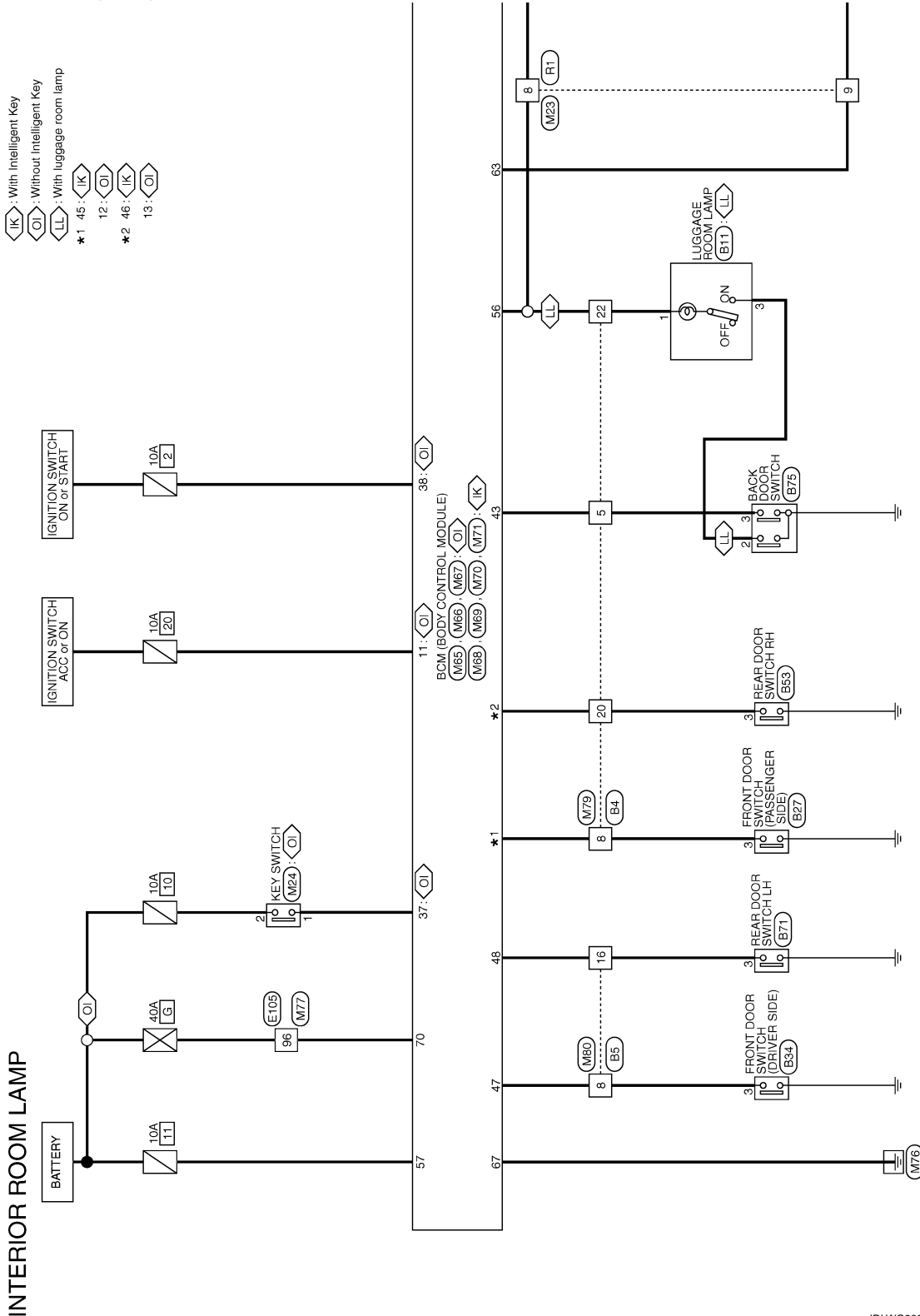
< DTC/CIRCUIT DIAGNOSIS >

INTERIOR ROOM LAMP CONTROL SYSTEM

Wiring Diagram - INTERIOR ROOM LAMP -

INFOID:000000008452530

For connector terminal arrangements, harness layouts, and alphabets in a  (option abbreviation; if not described in wiring diagram), refer to [GI-12, "Connector Information"](#).

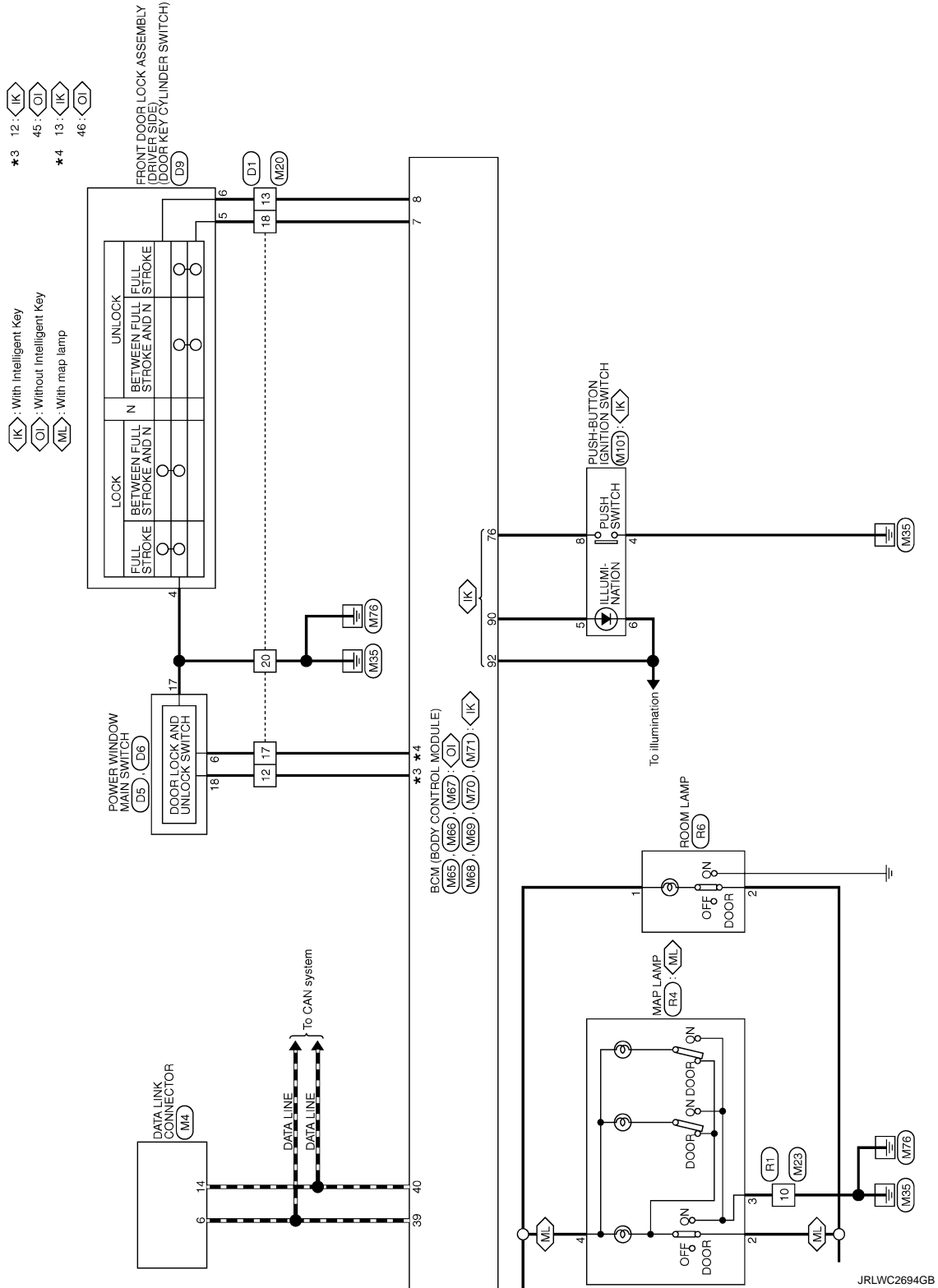


2012/07/30

JRLWC2693GB

INTERIOR ROOM LAMP CONTROL SYSTEM

< DTC/CIRCUIT DIAGNOSIS >



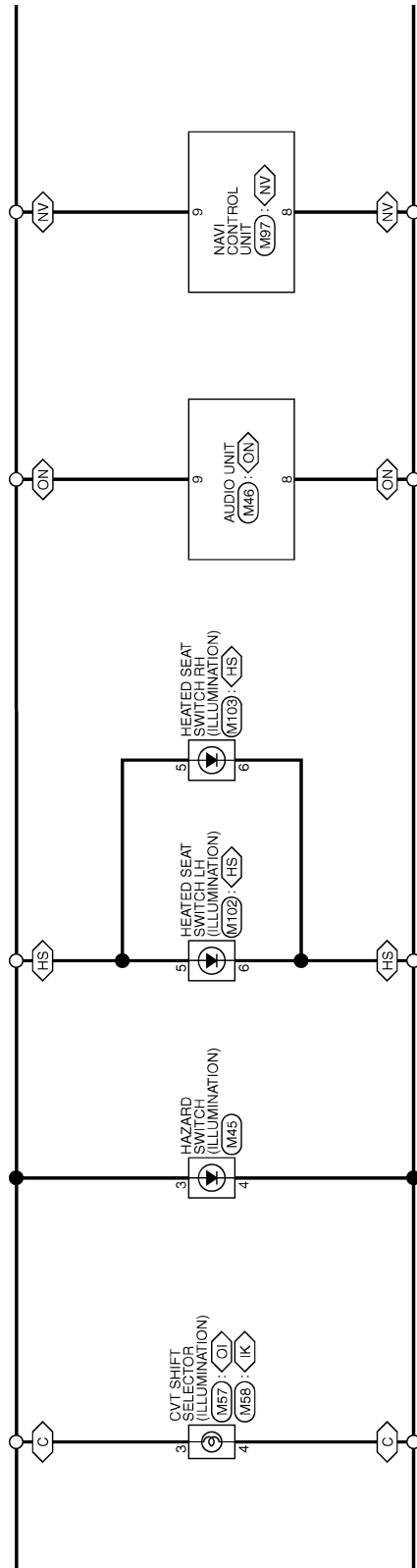
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

- ◁C▷ : With CVT
- ◁IK▷ : With Intelligent Key
- ◁ON▷ : Without Intelligent Key
- ◁HS▷ : With heated seat
- ◁NV▷ : With NAVI
- ◁ON▷ : Without NAVI



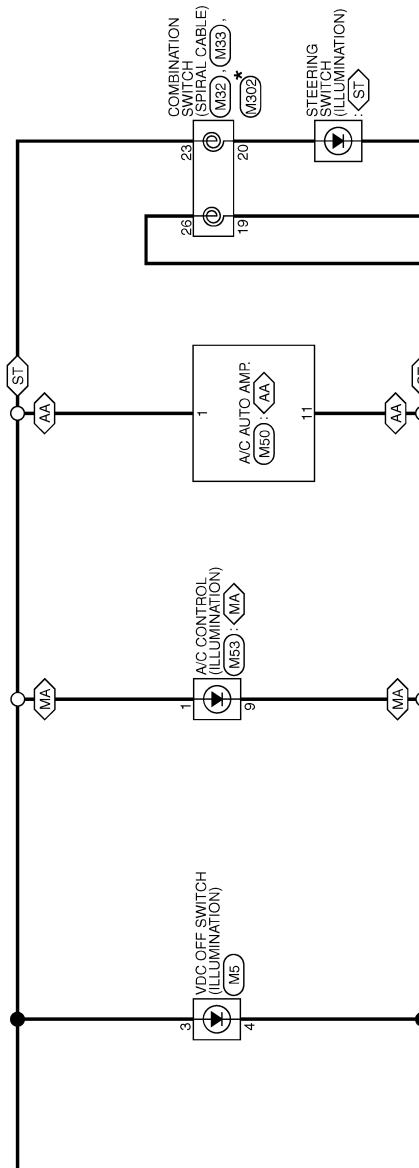
JRLWC2696GB

- A
- B
- C
- D
- E
- F
- G
- H
- I
- J
- K
- INL**
- M
- N
- O
- P

ILLUMINATION

< DTC/CIRCUIT DIAGNOSIS >

- AA : With auto A/C
- MA : With manual A/C
- ST : With steering switch



*: This connector is not shown in "Harness Layout".

JRLWC2697GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

ECU DIAGNOSIS INFORMATION

BCM (BODY CONTROL MODULE)

WITH INTELLIGENT KEY

WITH INTELLIGENT KEY : Reference Value

INFOID:0000000008894590

VALUES ON THE DIAGNOSIS TOOL

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

CONSULT MONITOR ITEM

Monitor Item	Condition	Value/Status
FR WIPER HI	Other than front wiper switch HI	Off
	Front wiper switch HI	On
FR WIPER LOW	Other than front wiper switch LO	Off
	Front wiper switch LO	On
FR WASHER SW	Front washer switch OFF	Off
	Front washer switch ON	On
FR WIPER INT	Other than front wiper switch INT	Off
	Front wiper switch INT	On
FR WIPER STOP	Front wiper is not in STOP position	Off
	Front wiper is in STOP position	On
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	Wiper intermittent dial position
RR WIPER ON	Other than rear wiper switch ON	Off
	Rear wiper switch ON	On
RR WIPER INT	Other than rear wiper switch INT	Off
	Rear wiper switch INT	On
RR WASHER SW	Rear washer switch OFF	Off
	Rear washer switch ON	On
RR WIPER STOP	Rear wiper is in STOP position	Off
	Rear wiper is not in STOP position	On
TURN SIGNAL R	Other than turn signal switch RH	Off
	Turn signal switch RH	On
TURN SIGNAL L	Other than turn signal switch LH	Off
	Turn signal switch LH	On
TAIL LAMP SW	Other than lighting switch 1ST and 2ND	Off
	Lighting switch 1ST or 2ND	On
HI BEAM SW	Other than lighting switch HI	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Other than lighting switch 2ND	Off
	Lighting switch 2ND	On
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
AUTO LIGHT SW	Other than lighting switch AUTO	Off
	Lighting switch AUTO	On
FR FOG SW	Front fog lamp switch OFF	Off
	Front fog lamp switch ON	On
DOOR SW-DR	Driver door closed	Off
	Driver door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
DOOR SW-BK	Back door closed	Off
	Back door opened	On
CDL LOCK SW	Other than power door lock switch LOCK	Off
	Power door lock switch LOCK	On
CDL UNLOCK SW	Other than power door lock switch UNLOCK	Off
	Power door lock switch UNLOCK	On
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
HAZARD SW	Hazard switch is OFF	Off
	Hazard switch is ON	On
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
TR/BD OPEN SW	NOTE: The item is indicated, but not monitored.	Off
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
FAN ON SIG	Blower fan OFF	Off
	Blower fan ON	On
AIR COND SW	Air conditioner OFF (A/C switch indicator OFF)	Off
	Air conditioner ON (A/C switch indicator ON)	On
RKE-LOCK	LOCK button of the key is not pressed	Off
	LOCK button of the key is pressed	On
RKE-UNLOCK	UNLOCK button of the key is not pressed	Off
	UNLOCK button of the key is pressed	On
RKE-TR/BD	BACK DOOR OPEN button of the key is not pressed	Off
	BACK DOOR OPEN button of the key is pressed	On
RKE-PANIC	PANIC button of the key is not pressed	Off
	PANIC button of the key is pressed	On
RKE-MODE CHG	LOCK/UNLOCK button of the key is not pressed and held simultaneously	Off
	LOCK/UNLOCK button of the key is pressed and held simultaneously	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
OPTI SEN (DTCT)	Bright outside of the vehicle	Close to 5 V	A
	Dark outside of the vehicle	Close to 0 V	
OPTI SEN (FILT)	Bright outside of the vehicle (Lighting switch AUTO)	Close to 5 V	B
	Dark outside of the vehicle (Lighting switch AUTO)	Close to 1.50 V	
OPTICAL SENSOR	NOTE: The item is indicated, but not monitored.	Off	C
RAIN SENSOR	NOTE: The item is indicated, but not monitored.	Off	
REQ SW -DR	Driver door request switch is not pressed	Off	D
	Driver door request switch is pressed	On	
REQ SW -AS	Passenger door request switch is not pressed	Off	E
	Passenger door request switch is pressed	On	
REQ SW -RR	NOTE: The item is indicated, but not monitored.	Off	F
REQ SW -RL	NOTE: The item is indicated, but not monitored.	Off	
REQ SW -BD/TR	Back door request switch is not pressed	Off	G
	Back door request switch is pressed	On	
PUSH SW	Push-button ignition switch (push switch) is not pressed	Off	H
	Push-button ignition switch (push switch) is pressed	On	
CLUCH SW	The clutch pedal is not depressed.	Off	I
	The clutch pedal is depressed	On	
BRAKE SW 1	The brake pedal is not depressed	Off	J
	The brake pedal is depressed	On	
BRAKE SW 2	The brake pedal is depressed when No. 9 fuse is blown	Off	
	The brake pedal is not depressed when No. 9 fuse is blown, or No. 9 fuse is normal	On	
DETE/CANCL SW	Selector lever in P position	Off	K
	Selector lever in any position other than P	On	
SFT PN/N SW	Selector lever in any position other than P and N	Off	INL
	Selector lever in P or N position	On	
S/L -LOCK	NOTE: The item is indicated, but not monitored.	Off	M
S/L -UNLOCK	NOTE: The item is indicated, but not monitored.	Off	
S/L RELAY-F/B	NOTE: The item is indicated, but not monitored.	Off	N
UNLK SEN -DR	Driver door is locked	Off	O
	Driver door is unlocked	On	
PUSH SW -IPDM	Push-button ignition switch (push-switch) is not pressed	Off	P
	Push-button ignition switch (push-switch) is pressed	On	
IGN RLY1 -F/B	Ignition switch in OFF or ACC position	Off	
	Ignition switch in ON position	On	
DETE SW -IPDM	Selector lever in any position other than P	Off	
	Selector lever in P position	On	
SFT PN -IPDM	Selector lever in any position other than P and N	Off	
	Selector lever in P or N position	On	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
SFT P -MET	Selector lever in any position other than P	Off
	Selector lever in P position	On
SFT N -MET	Selector lever in any position other than N	Off
	Selector lever in N position	On
ENGINE STATE	Engine stopped	Stop
	While the engine stalls	Stall
	At engine cranking	Crank
	Engine running	Run
S/L LOCK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L UNLK-IPDM	NOTE: The item is indicated, but not monitored.	Off
S/L RELAY-REQ	NOTE: The item is indicated, but not monitored.	Off
VEH SPEED 1	While driving	Equivalent to speedometer reading
VEH SPEED 2	While driving	Equivalent to speedometer reading
DOOR STAT-DR	Driver door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Driver door is unlocked	UNLOCK
DOOR STAT-AS	Passenger door is locked	LOCK
	Wait with selective UNLOCK operation (5 seconds)	READY
	Passenger door is unlocked	UNLOCK
ID OK FLAG	Driver side door is open after ignition switch is turned OFF (Selector lever is in the P position except for M/T models)	Reset
	Ignition switch ON	Set
PRMT ENG STRT	The engine start is prohibited	Reset
	The engine start is permitted	Set
PRMT RKE STRT	NOTE: The item is indicated, but not monitored.	Reset
RKE OPE COUN1	During the operation of the key	Operation frequency of the key
RKE OPE COUN2	NOTE: The item is indicated, but not monitored.	—
CONFIRM ID ALL	The key ID that the key slot receives is not recognized by any key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by any key ID registered to BCM.	Done
CONFIRM ID4	The key ID that the key slot receives is not recognized by the fourth key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the fourth key ID registered to BCM.	Done
CONFIRM ID3	The key ID that the key slot receives is not recognized by the third key ID registered to BCM.	Yet
	The key ID that the key slot receives is recognized by the third key ID registered to BCM.	Done

BCM (BODY CONTROL MODULE)

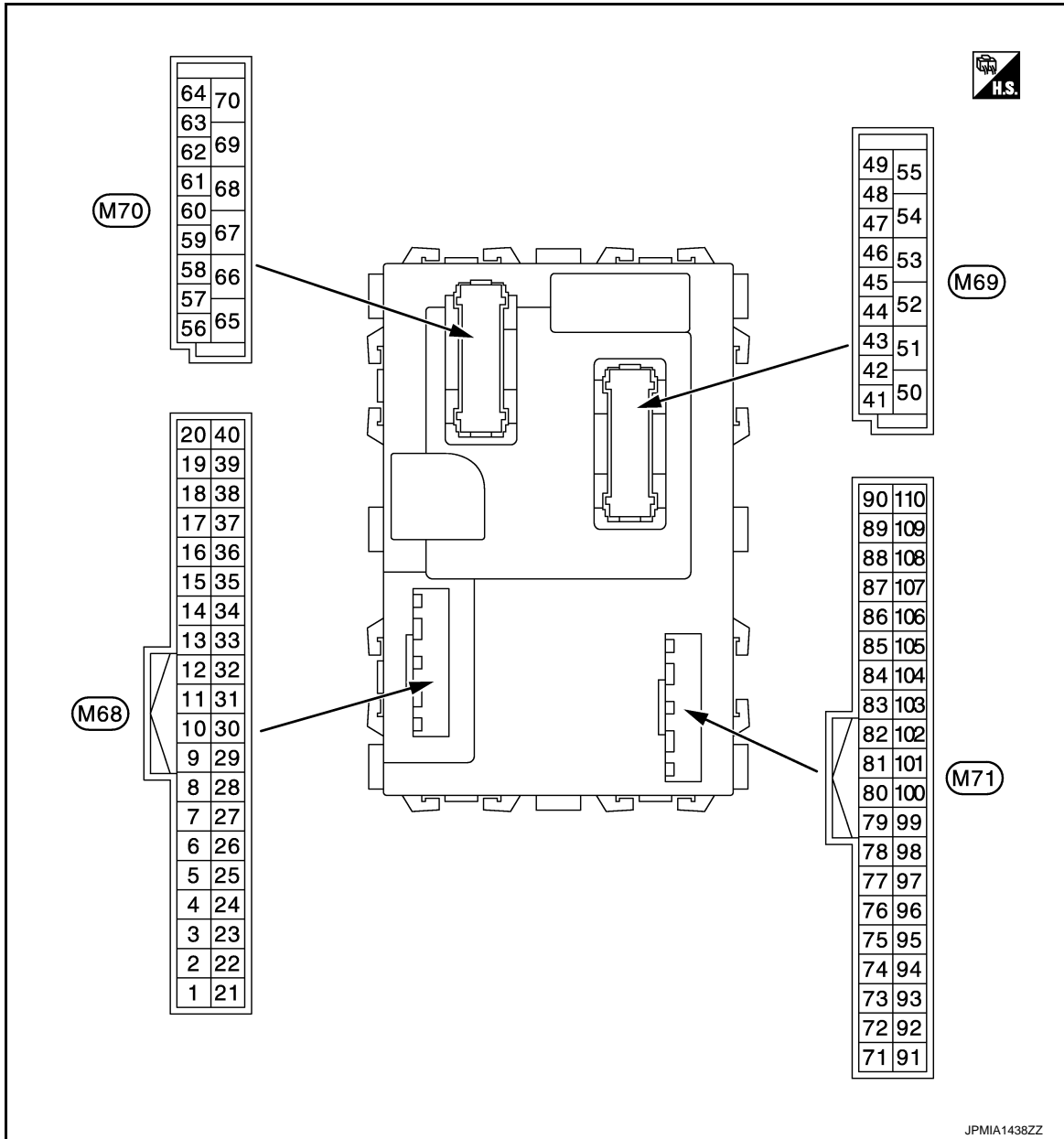
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
CONFIRM ID2	The key ID that the key slot receives is not recognized by the second key ID registered to BCM.	Yet	A
	The key ID that the key slot receives is recognized by the second key ID registered to BCM.	Done	B
CONFIRM ID1	The key ID that the key slot receives is not recognized by the first key ID registered to BCM.	Yet	C
	The key ID that the key slot receives is recognized by the first key ID registered to BCM.	Done	
NOT REGISTERED	BCM detects registered key ID, or BCM does not detect key ID.	ID OK	D
	BCM detects non-registration key ID.	ID NG	
TP 4	The ID of fourth key is not registered to BCM	Yet	E
	The ID of fourth key is registered to BCM	Done	
TP 3	The ID of third key is not registered to BCM	Yet	F
	The ID of third key is registered to BCM	Done	
TP 2	The ID of second key is not registered to BCM	Yet	G
	The ID of second key is registered to BCM	Done	
TP 1	The ID of first key is not registered to BCM	Yet	H
	The ID of first key is registered to BCM	Done	
AIR PRESS FL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front LH tire	I
AIR PRESS FR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of front RH tire	J
AIR PRESS RR	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear RH tire	K
AIR PRESS RL	Ignition switch ON (Only when the signal from the transmitter is received)	Air pressure of rear LH tire	
ID REGST FL1	ID of front LH tire transmitter is registered	Done	
	ID of front LH tire transmitter is not registered	Yet	
ID REGST FR1	ID of front RH tire transmitter is registered	Done	
	ID of front RH tire transmitter is not registered	Yet	
ID REGST RR1	ID of rear RH tire transmitter is registered	Done	INL
	ID of rear RH tire transmitter is not registered	Yet	
ID REGST RL1	ID of rear LH tire transmitter is registered	Done	M
	ID of rear LH tire transmitter is not registered	Yet	
WARNING LAMP	Tire pressure indicator OFF	Off	N
	Tire pressure indicator ON	On	
BUZZER	Tire pressure warning alarm is not sounding	Off	O
	Tire pressure warning alarm is sounding	On	P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



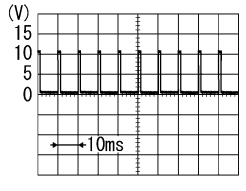
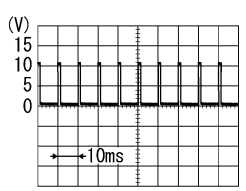
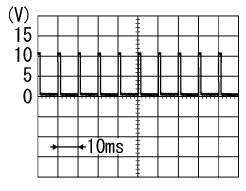
NOTE:

- Connector color
- M68, M70: Black
- M69, M71: White

PHYSICAL VALUES

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
2 (BR/W)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	
					Lighting switch 1ST	
					Lighting switch 2ND	
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	
					Lighting switch 2ND	
					Front fog lamp switch ON	
4 (L/Y)	Ground	Combination switch INPUT 3	Input	Combination switch (Wiper intermittent dial 4)	All switch OFF	0 V
					Front wiper switch LO	
					Front wiper switch MIST	
					Front wiper switch INT	
					Lighting switch AUTO	

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

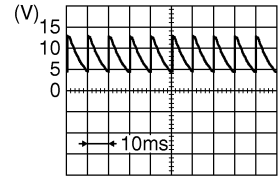
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch (Wiper intermittent dial 4)	
					Rear washer ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
				Rear wiper switch ON (Wiper intermittent dial 4)		0.8 V
6 (L/R)	Ground	Combination switch INPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Wiper intermittent dial 3 (All switch OFF)	
		Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 6 • Wiper intermittent dial 7 		0.8 V		

BCM (BODY CONTROL MODULE)

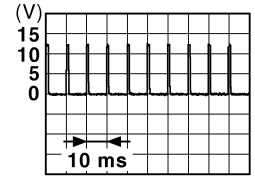
< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylinder switch	NEUTRAL position
				UNLOCK position	8.0 - 8.5 V
8 (W/B)	Ground	Door key cylinder switch LOCK	Input	Door key cylinder switch	NEUTRAL position
				LOCK position	0 V
9 (R)	Ground	Stop lamp switch 1	Input	Stop lamp switch	OFF (Brake pedal is not depressed)
				ON (Brake pedal is de- pressed)	Battery voltage
12 (GR)	Ground	Door lock and unlock switch LOCK	Input	Door lock and unlock switch	NEUTRAL position
				LOCK position	0 V
13 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position
				UNLOCK position	0 V
14 (L/G)	Ground	Optical sensor	Input	Ignition switch ON	When bright outside of the vehicle
				When dark outside of the vehicle	Close to 0 V
15 (W/L)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	Not pressed
				Pressed	0 V
17 (R/G)	Ground	Optical sensor pow- er supply	Output	Ignition switch	OFF, ACC
				ON	5 V

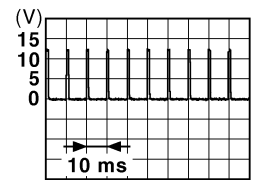
A
B
C
D
E
F
G
H
I
J
K
M
N
O
P



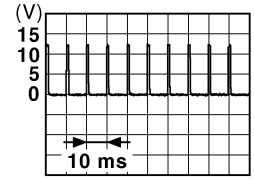
JPMIA0587GB
8.0 - 8.5 V



JPMIA0012GB
1.0 - 1.5 V



JPMIA0012GB
1.0 - 1.5 V

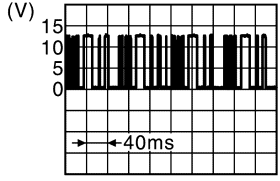
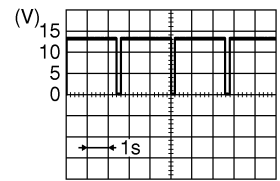
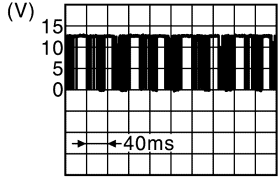


JPMIA0012GB
1.0 - 1.5 V

INL

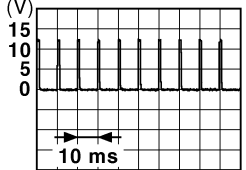
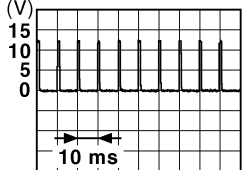
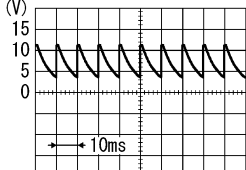
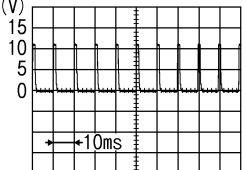
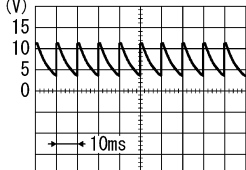
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
		Signal name	Input/ Output		
+	-				
18 (V)	Ground	Sensor ground	Input	Ignition switch ON	0 V
21 (P/L)	Ground	NATS antenna amp.	Input/ Output	Intelligent Key: Intelligent Key battery is re- moved	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed  <small>JMKIA6232JP</small>
				Brake pedal: Not de- pressed	12 V
23 (R/Y)	Ground	Security indicator lamp	Output	Security indica- tor	ON 0 V  <small>JPMIA0590GB</small>
				Blinking (Ignition switch OFF)	12.0 V
				OFF	Battery voltage
24*1 (SB)	Ground	Dongle link	Input/ Output	Ignition switch OFF	5 V
25 (LG)	Ground	NATS antenna amp.	Input/ Output	During waiting	Brake pedal: Depressed NOTE: Waveform varies each time when brake pedal is depressed  <small>JMKIA6233JP</small>
				Brake pedal: Not de- pressed	12 V
26*2 (GR)	Ground	Thermo control amp.	Input	Ignition switch ON	0 V
				Evaporator is extremely low temperature	12 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

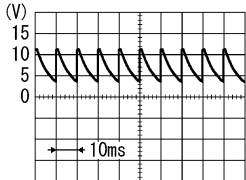
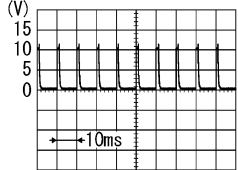
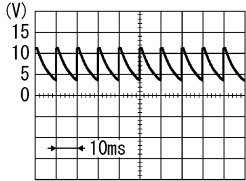
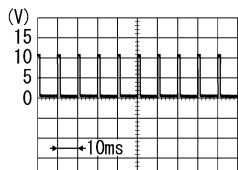
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
27 (O)	Ground	A/C ON (Automatic A/C)	Input	A/C	OFF (A/C switch indicator: OFF)	 <small>JPMIA0012GB</small> 1.0 - 1.5 V
				A/C	ON (A/C switch indicator: ON)	0 V
		A/C switch (Manual A/C)	A/C switch	OFF	 <small>JPMIA0012GB</small> 1.0 - 1.5 V	
				ON	0 V	
28 (G/W)	Ground	Blower fan switch (Automatic A/C)	Input	Fan switch	Blower fan switch OFF	0 V
				Fan switch	Blower fan switch ON	 <small>PKIB4960J</small> 7.0 - 8.0 V
		Blower fan switch (Manual A/C)	Fan switch	Blower fan switch OFF	 <small>PIIB7730J</small> 1.5 - 2.0 V	
				Blower fan switch ON	0 V	
29 (L/W)	Ground	Hazard switch	Input	Hazard switch	OFF	12 V
				Hazard switch	ON	0 V
31 (G/B)	Ground	Front door lock as- sembly driver side (Unlock sensor)	Input	Driver door	LOCK status (Unlock sensor switch OFF)	 <small>PKIB4960J</small> 7.0 - 8.0 V
				Driver door	UNLOCK status (Unlock sensor switch ON)	0 V

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

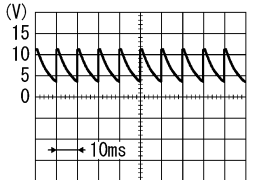
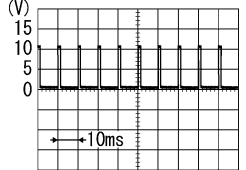
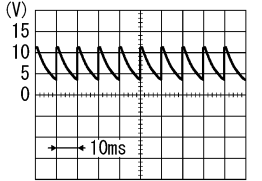
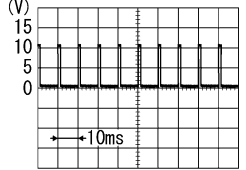
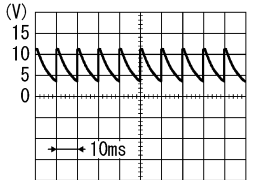
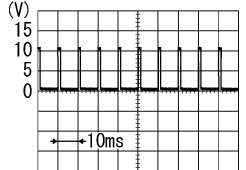
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: center;">7.0 - 8.0 V</p>
					Front fog lamp switch ON (Wiper intermittent dial 4)	 <p style="text-align: center;">1.0 V</p>
					Rear wiper switch ON (Wiper intermittent dial 4)	
Any of the condition below with all switch OFF						
<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 						
33 (Y/L)	Ground	Combination switch OUTPUT 4	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: center;">1.2 V</p>
					Lighting switch AUTO (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
Any of the condition below with all switch OFF						
<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 						

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
Any of the condition below with all switch OFF						
<ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 						
35 (R/L)	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND	 <p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Lighting switch PASS	
					Front wiper switch INT	
Front wiper switch HI						
36 (L/O)	Ground	Combination switch OUTPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: right;">PKIB4960J</p> <p style="text-align: center;">7.0 - 8.0 V</p>
					Turn signal switch RH	 <p style="text-align: right;">PKIB4958J</p> <p style="text-align: center;">1.2 V</p>
					Turn signal switch LH	
					Front wiper switch LO (Front wiper switch MIST)	
Front washer switch ON						

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

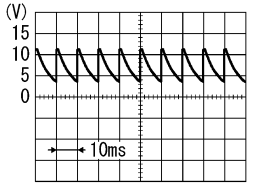
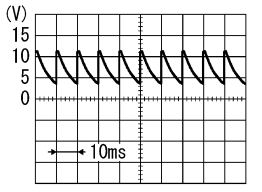
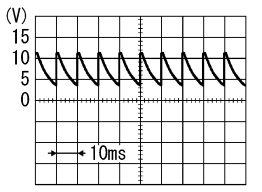
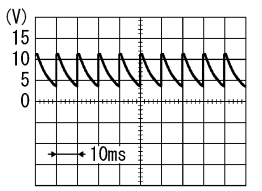
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
37 (G/O)	Ground	Selector lever P position switch	Input	Selector lever	P position	0 V
					Any position other than P	12 V
38 (G/Y)	Ground	Receiver communication	Input/ Output	Ignition switch OFF (Remote keyless entry communication)	Waiting	12 V
					When operating either button on Intelligent Key	
				Ignition switch ON (TPMS communication)	Waiting	
					When receiving signal from tire pressure sensor	
39 (L)	Ground	CAN-H	Input/ Output	—	—	
40 (P)	Ground	CAN-L	Input/ Output	—	—	
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed)	 9.5 - 10.0 V
					ON (When back door opened)	0 V
44 (LG)	Ground	Rear wiper stop position	Input	Ignition switch ON	Rear wiper stop position	12 V
					Any position other than rear wiper stop position	0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

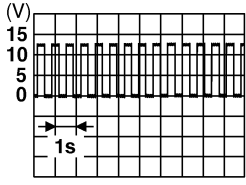
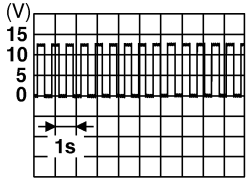
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
45 (SB)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 7.0 - 8.0 V
				Passenger door switch	ON (When passenger door opened)	0 V
46 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	 7.0 - 8.0 V
				Rear RH door switch	ON (When rear RH door opened)	0 V
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 7.0 - 8.0 V
				Driver door switch	ON (When driver door opened)	0 V
48 (W/G)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	 7.0 - 8.0 V
				Rear LH door switch	ON (When rear door LH opened)	0 V
50 (R/W)	Ground	Back door lock actuator relay control	Output	Back door	LOCK (Actuator is activated)	0 V
				Back door	Other than LOCK (Actuator is not activated)	Battery voltage
51 (W)	Ground	Back door request switch	Input	Back door request switch	ON (Pressed)	0 V
					Back door request switch	OFF (Not pressed)
54 (LG)	Ground	Rear wiper	Output	Rear wiper	OFF (Stopped)	0 V
					Rear wiper	ON (Activated)

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
		Signal name	Input/ Output			
+	-					
55 (G)	Ground	Rear door UNLOCK	Output	Rear door	UNLOCK (Actuator is activated)	12 V
					Other then UNLOCK (Actuator is not activated)	0 V
56 (L)	Ground	Interior room lamp power supply	Output		Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)	0 V
					Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)	12 V
57 (Y)	Ground	Battery power supply	Input	Ignition switch OFF		Battery voltage
59 (G)	Ground	Passenger door UNLOCK	Output	Passenger door	UNLOCK (Actuator is activated)	12 V
					Other then UNLOCK (Actuator is not activated)	0 V
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch LH	 <p style="text-align: right; font-size: small;">PKIC6370E</p>
						6.0 V
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	Turn signal switch OFF	0 V
					Turn signal switch RH	 <p style="text-align: right; font-size: small;">PKIC6370E</p>
						6.0 V
63 (BR)	Ground	Interior room lamp control signal	Output	Interior room lamp	OFF	12 V
					ON	0 V
65 (V)	Ground	All doors LOCK	Output	All doors	LOCK (Actuator is activated)	12 V
					Other then LOCK (Actuator is not activated)	0 V
66 (L/B)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	12 V
					Other then UNLOCK (Actuator is not activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON		0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON		12 V
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF		12 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

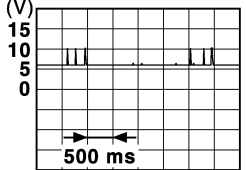
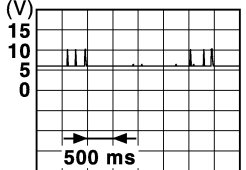
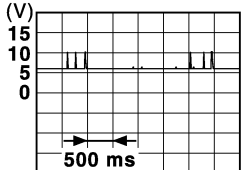
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
70 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage	
72*2 (SB)	Ground	A/C indicator	Output	A/C indicator	OFF	12 V
					ON	0 V
75 (SB)	Ground	Driver door request switch	Input	Driver door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	12 V
76 (L/O)	Ground	Push-button ignition switch (push switch)	Input	Push-button ignition switch (push switch)	Pressed	0 V
					Not pressed	12 V
78 (LG)	Ground	Driver door antenna (+)	Output	When the driver door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	<p style="text-align: right; font-size: small;">JMKIA5954GB</p>
					When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	<p style="text-align: right; font-size: small;">JMKIA5955GB</p>
79 (V)	Ground	Driver door antenna (-)	Output	When the driver door request switch is operated with ignition switch ON	When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	<p style="text-align: right; font-size: small;">JMKIA5954GB</p>
					When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)	<p style="text-align: right; font-size: small;">JMKIA5955GB</p>

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
80 (BR/Y)	Ground	Passenger door antenna (+)	Output	When the Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 <p style="text-align: right; font-size: small;">JMkia5954GB</p>
				When the passenger door request switch is operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)
81 (L/Y)	Ground	Passenger door antenna (-)	Output	When the Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 <p style="text-align: right; font-size: small;">JMkia5954GB</p>
				When the passenger door request switch is operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)
82 (W/B)	Ground	Back door antenna (+)	Output	When the Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	 <p style="text-align: right; font-size: small;">JMkia5954GB</p>
				When the back door request switch is operated with ignition switch ON	When Intelligent Key is in the antenna detection area (The distance between Intelligent Key and antenna: 80 cm or less)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

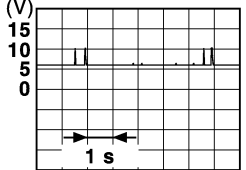
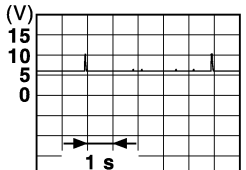
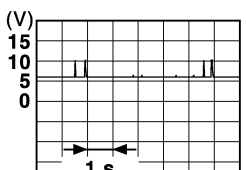
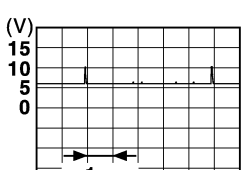
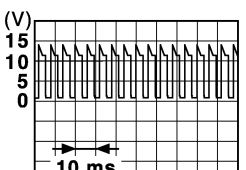
Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
83 (B/W)	Ground	Back door antenna (-)	Output	When the back door request switch is operated with ignition switch ON	<p style="text-align: right; font-size: small;">JMKIA5954GB</p>
				When Intelligent Key is not in the antenna detection area (The distance between Intelligent Key and antenna: Approx. 2 m)	<p style="text-align: right; font-size: small;">JMKIA5955GB</p>
84 (Y/G)	Ground	Room antenna (+) (Instrument center)	Output	Ignition switch ON	<p style="text-align: right; font-size: small;">JMKIA5951GB</p>
				When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA3839GB</p>
85 (Y/L)	Ground	Room antenna (-) (Instrument center)	Output	Ignition switch ON	<p style="text-align: right; font-size: small;">JMKIA5951GB</p>
				When Intelligent Key is in the antenna detection area	<p style="text-align: right; font-size: small;">JMKIA3839GB</p>

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL

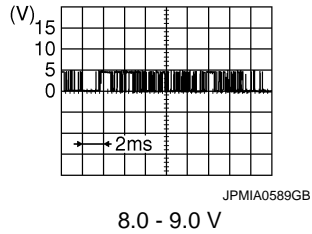
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
86 (P)	Ground	Luggage room antenna (+)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA5951GB</p>
					When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA3839GB</p>
87 (L)	Ground	Luggage room antenna (-)	Output	Ignition switch ON	When Intelligent Key is not in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA5951GB</p>
					When Intelligent Key is in the antenna detection area	 <p style="text-align: right; font-size: small;">JMKIA3839GB</p>
90 (W/L)	Ground	Push-button ignition switch illumination	Output	Push-button ignition switch illumination	ON	12 V
					OFF	0 V
91 (Y)	Ground	ACC/ON indicator lamp	Output	Ignition switch	OFF	Battery voltage
					ACC or ON	0.5 V
92 (BR/R)	Ground	Push-button ignition switch illumination ground	Output	Tail lamp	OFF	0 V
					ON	<p>NOTE: When the illumination brightening/dimming level is in the neutral position</p>  <p style="text-align: right; font-size: small;">JPMIA1554GB</p> <p style="text-align: center;">6.0 - 7.0 V</p>

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
93 (GR/W)	Ground	Intelligent Key warn- ing buzzer	Output	Intelligent Key warning buzzer	Sounding	0 V
					Not sounding	12 V
96 (BR/W)	Ground	ACC relay control	Output	Ignition switch	OFF	0 V
					ACC or ON	12 V
97 (L/R)	Ground	Starter relay control	Output	Ignition switch ON	When selector lever is in P or N position	Battery voltage
					When selector lever is not in P or N position	0 V
98 (BR)	Ground	Ignition relay (IPDM E/R) control	Output	Ignition switch	OFF or ACC	12 V
					ON	0 V
99 (W/R)	Ground	Ignition relay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V
100 (G)	Ground	Passenger door re- quest switch	Input	Passenger door request switch	ON (Pressed)	0 V
					OFF (Not pressed)	12 V
102 (G)	Ground	Selector lever P/N position	Input	Selector lever	P or N position	Battery voltage
					Except P and N positions	0 V
103*2 (G/Y)	Ground	Front defroster switch	Input	Ignition switch ON	A/C mode defroster ON position	0 V
					Other than A/C mode de- froster ON position	
104 (Y/R)	Ground	CVT shift selector (detention switch) power supply	Output	Ignition switch ON		12 V
105 (B/O)	Ground	Stop lamp switch 2	Input	Ignition switch OFF		Battery voltage
106 (Y/B)	Ground	Blower fan motor re- lay control	Output	Ignition switch	OFF or ACC	0 V
					ON	12 V

*1: For Canada

*2: Manual air conditioner


A
B
C
D
E
F
G
H
I
J
K
INL
M
N
O
P

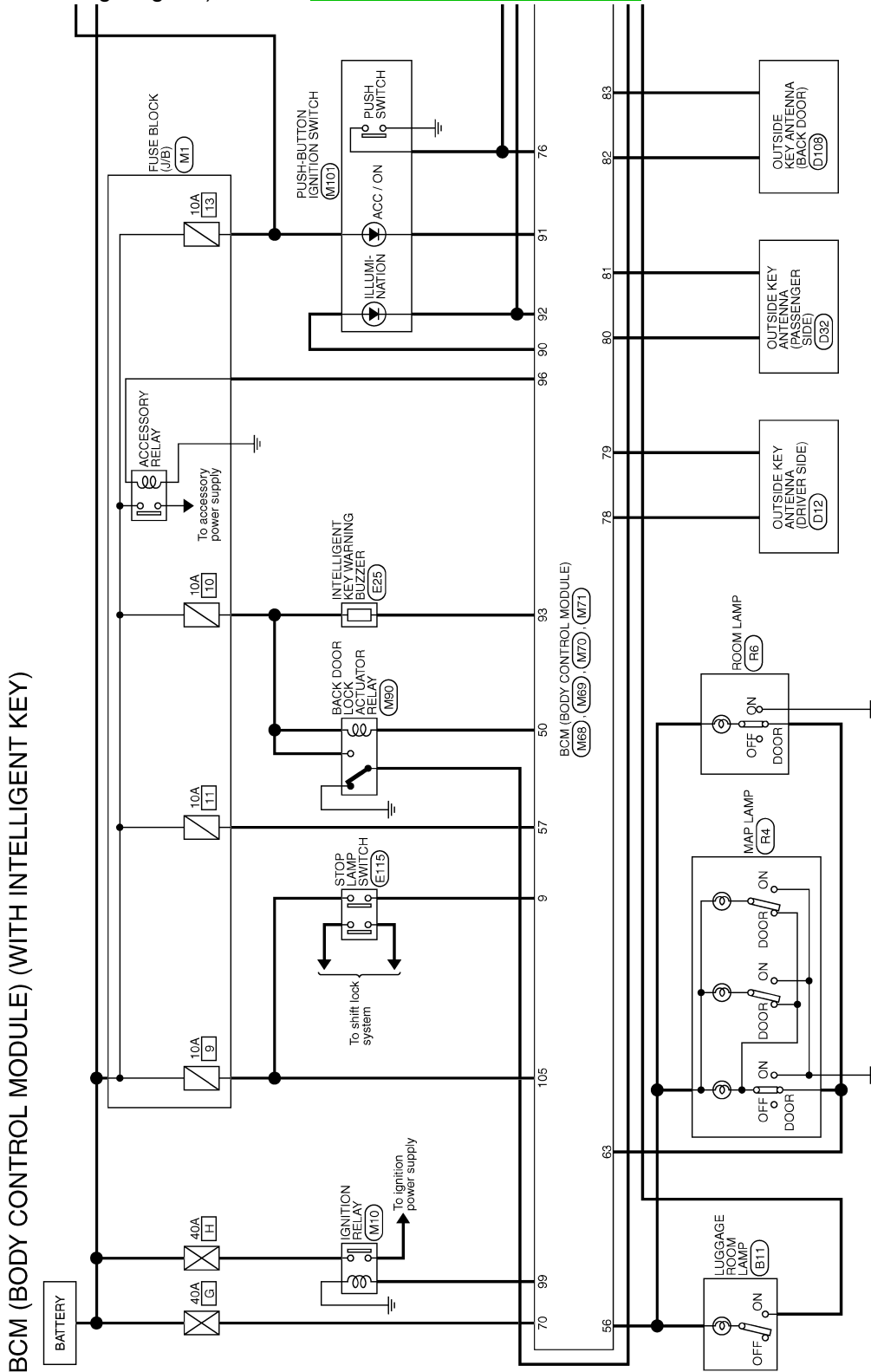
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

WITH INTELLIGENT KEY : Wiring Diagram - BCM -

INFOID:000000008894591

For connector terminal arrangements, harness layouts, and alphabets in a  (option abbreviation; if not described in wiring diagram), refer to [GI-12, "Connector Information"](#).

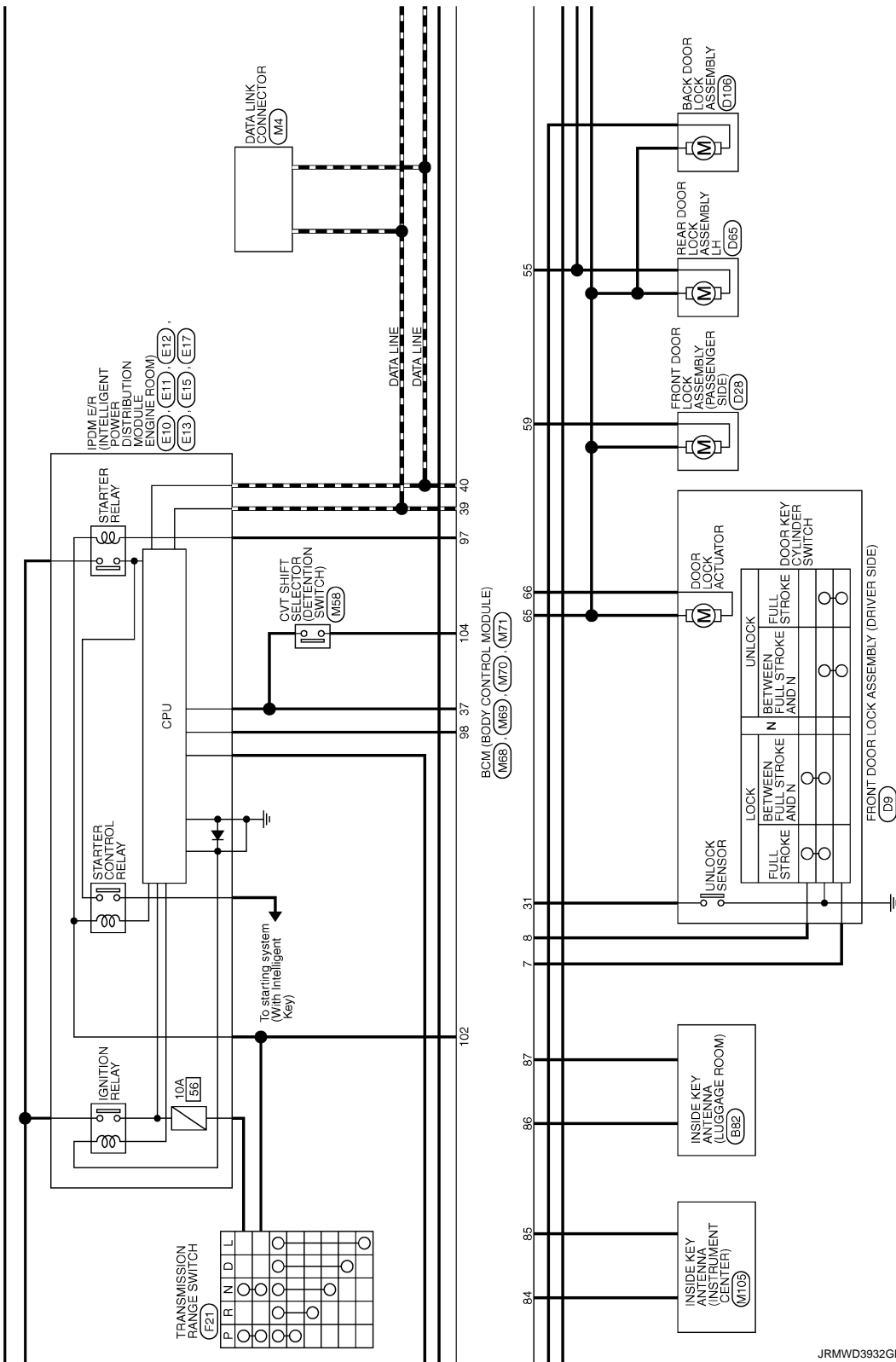


JRMWD3931GB

2012/07/30

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >



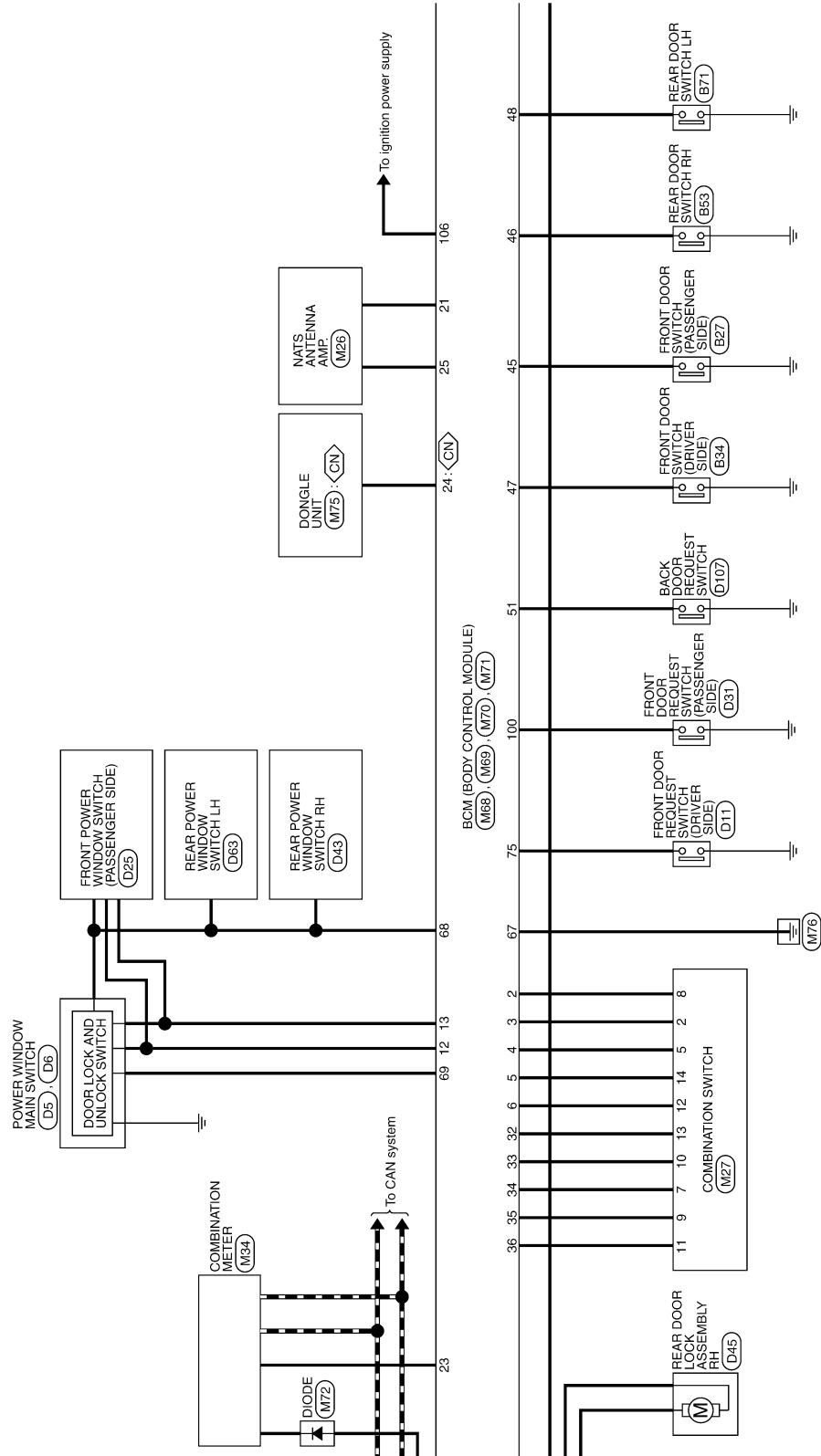
JRMWD3932GB

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

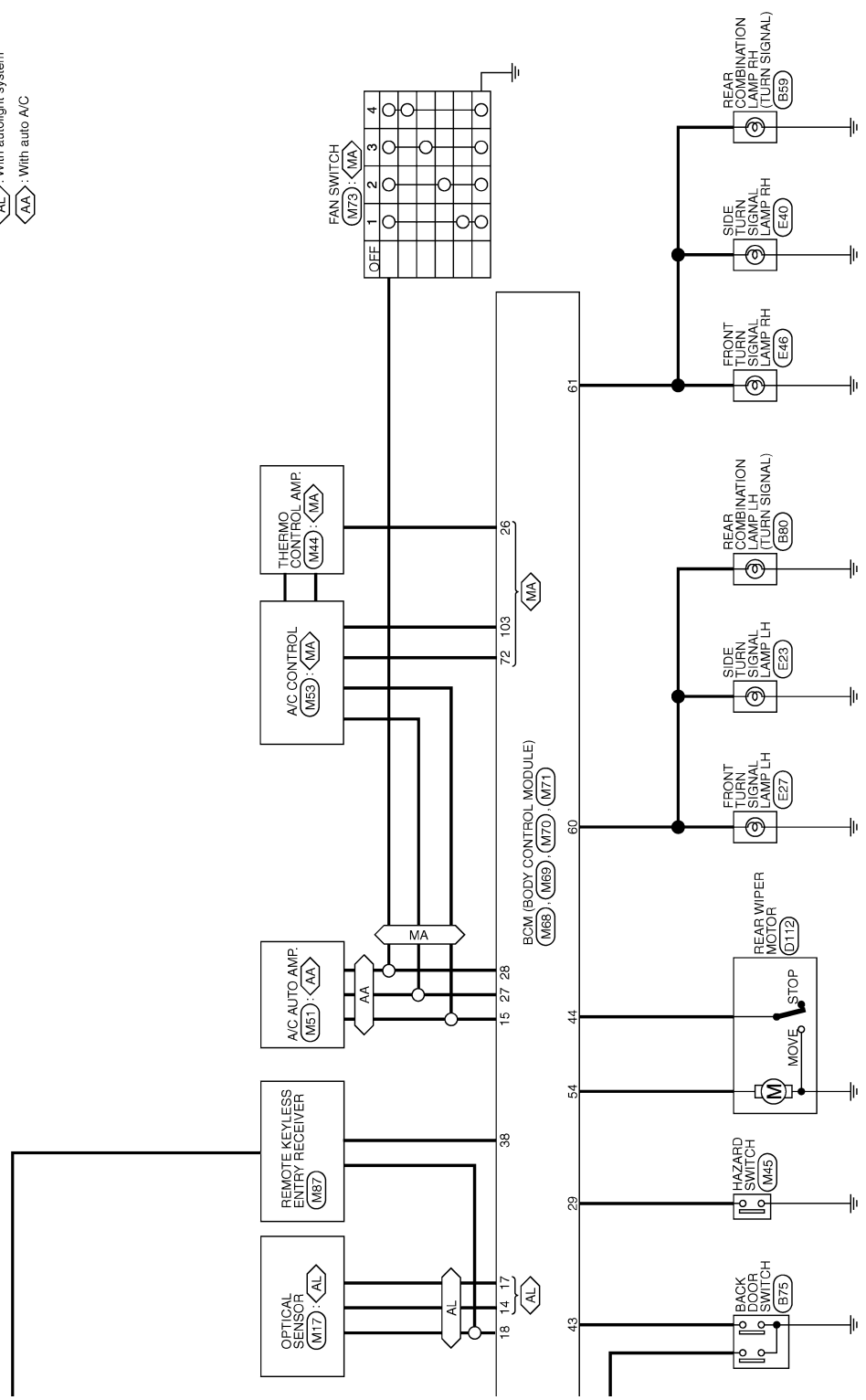


JRMWD3933GB

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- : For Canada
- : With manual A/C
- : With autolight system
- : With auto A/C



WITH INTELLIGENT KEY : Fail-safe

FAIL-SAFE CONTROL BY DTC
 BCM performs fail-safe control when any DTC are detected.

JRMWD3934GB

INFOID:000000008894592

A
B
C
D
E
F
G
H
I
J
K
INL
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI-SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC
B2198: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2608: STARTER RELAY	Inhibit engine cranking	500 ms after the following signal communication status becomes consistent <ul style="list-style-type: none"> • Starter relay control signal • Starter relay status signal (CAN)
B260F: ENG STATE SIG LOST	Inhibit engine cranking	When any of the following conditions are fulfilled <ul style="list-style-type: none"> • Power position changes to ACC • Receives engine status signal (CAN)
B26F1: IGN RELAY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch ON signal (CAN: Transmitted from BCM): ON • Ignition switch ON signal (CAN: Transmitted from IPDM E/R): ON
B26F2: IGN RELAY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Ignition switch ON signal (CAN: Transmitted from BCM): OFF • Ignition switch ON signal (CAN: Transmitted from IPDM E/R): OFF
B26F3: START CONT RLY ON	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Starter control relay signal (CAN: Transmitted from BCM): OFF • Starter control relay signal (CAN: Transmitted from IPDM E/R): OFF
B26F4: START CONT RLY OFF	Inhibit engine cranking	When the following conditions are fulfilled <ul style="list-style-type: none"> • Starter control relay signal (CAN: Transmitted from BCM): ON • Starter control relay signal (CAN: Transmitted from IPDM E/R): ON
B26F7: BCM	Inhibit engine cranking by Intelligent Key system	When room antenna and luggage room antenna functions normally

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper stop position signal.

When the rear wiper stop position signal does not change for more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

1. More than 1 minute is passed after the rear wiper stop.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

FAIL-SAFE CONTROL OF COMBINATION SWITCH READING FUNCTION CAUSED BY LOW POWER SUPPLY VOLTAGE

If voltage of battery power supply lower, BCM maintains combination switch reading to the status when input voltage is less than approximately 9 V.

NOTE:

When voltage of battery power supply is approximately 9 V or more, combination switch reading function returns to normal operation.

WITH INTELLIGENT KEY : DTC Inspection Priority Chart

INFOID:000000008894593

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	B2562: LOW VOLTAGE
2	<ul style="list-style-type: none"> • U1000: CAN COMM CIRCUIT • U1010: CONTROL UNIT (CAN)

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Priority	DTC	
3	<ul style="list-style-type: none"> • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI-SCANNING • B2196: DONGLE NG • B2198: NATS ANTENNA AMP 	A B
4	<ul style="list-style-type: none"> • B2555: STOP LAMP • B2556: PUSH-BTN IGN SW • B2557: VEHICLE SPEED • B2601: SHIFT POSITION • B2602: SHIFT POSITION • B2603: SHIFT POSI STATUS • B2604: PNP/CLUTCH SW • B2605: PNP/CLUTCH SW • B2608: STARTER RELAY • B260F: ENG STATE SIG LOST • B2614: BCM • B2615: BCM • B2616: BCM • B2618: BCM • B261A: PUSH-BTN IGN SW • B26F1: IGN RELAY OFF • B26F2: IGN RELAY ON • B26F3: START CONT RLY ON • B26F4: START CONT RLY OFF • B26F6: BCM • B26F7: BCM • B26F8: BCM • B26FC: KEY REGISTRATION • C1729: VHCL SPEED SIG ERR • U0415: VEHICLE SPEED 	C D E F G H I
5	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL 	J K INL
6	<ul style="list-style-type: none"> • B2621: INSIDE ANTENNA • B2622: INSIDE ANTENNA 	M
7	<ul style="list-style-type: none"> • B2626: OUTSIDE ANTENNA • B2627: OUTSIDE ANTENNA • B2628: OUTSIDE ANTENNA 	N

WITH INTELLIGENT KEY : DTC Index

INFOID:000000008894594

NOTE:

The details of time display are as follows.

- CRNT: A malfunction is detected now.
- PAST: A malfunction was detected in the past.

IGN counter is displayed on Freeze Frame Data. For details of Freeze Frame Data, refer to [INL-13. "COMMON ITEM : CONSULT Function \(BCM - COMMON ITEM\)"](#).

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
No DTC is detected. further testing may be required.	—	—	—	—	—
U1000: CAN COMM	—	—	—	—	BCS-41
U1010: CONTROL UNIT (CAN)	—	—	—	—	BCS-42
U0415: VEHICLE SPEED	—	—	×	—	BCS-43
B2192: ID DISCORD BCM-ECM	×	—	—	—	SEC-38
B2193: CHAIN OF BCM-ECM	×	—	—	—	SEC-40
B2195: ANTI-SCANNING	×	—	—	—	SEC-41
B2196: DONGLE NG	×	—	—	—	SEC-42
B2198: NATS ANTENNA AMP	×	—	—	—	SEC-44
B2555: STOP LAMP	—	×	×	—	SEC-48
B2556: PUSH-BTN IGN SW	—	×	×	—	SEC-50
B2557: VEHICLE SPEED	—	×	×	—	SEC-52
B2562: LOW VOLTAGE	—	×	—	—	BCS-44
B2601: SHIFT POSITION	—	×	×	—	SEC-53
B2602: SHIFT POSITION	—	×	×	—	SEC-56
B2603: SHIFT POSI STATUS	—	×	×	—	SEC-59
B2604: PNP/CLUTCH SW	—	×	×	—	SEC-64
B2605: PNP/CLUTCH SW	—	×	×	—	SEC-67
B2608: STARTER RELAY	×	×	×	—	SEC-69
B260F: ENG STATE SIG LOST	×	×	×	—	SEC-71
B2614: BCM	—	×	×	—	PCS-75
B2615: BCM	—	×	×	—	PCS-78
B2616: BCM	—	×	×	—	PCS-81
B2618: BCM	—	×	×	—	PCS-84
B261A: PUSH-BTN IGN SW	—	×	×	—	PCS-85
B2621: INSIDE ANTENNA	—	×	—	—	DLK-44
B2622: INSIDE ANTENNA	—	×	—	—	DLK-46
B2626: OUTSIDE ANTENNA	—	×	—	—	DLK-50
B2627: OUTSIDE ANTENNA	—	×	—	—	DLK-48
B2628: OUTSIDE ANTENNA	—	×	—	—	DLK-52
B26F1: IGN RELAY OFF	×	×	×	—	PCS-87
B26F2: IGN RELAY ON	×	×	×	—	PCS-89
B26F3: START CONT RLY ON	×	×	×	—	SEC-72
B26F4: START CONT RLY OFF	×	×	×	—	SEC-73
B26F6: BCM	—	×	×	—	PCS-91
B26F7: BCM	×	×	×	—	SEC-75
B26F8: BCM	—	×	×	—	SEC-76
B26FC: KEY REGISTRATION	—	×	×	—	SEC-77

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Freeze Frame Data •Vehicle Speed •Odo/Trip Meter •Vehicle Condition	Intelligent Key warning lamp ON	Tire pressure monitor warning lamp ON	Reference page
C1704: LOW PRESSURE FL	—	—	—	×	WT-23
C1705: LOW PRESSURE FR	—	—	—	×	
C1706: LOW PRESSURE RR	—	—	—	×	
C1707: LOW PRESSURE RL	—	—	—	×	
C1708: [NO DATA] FL	—	—	—	×	WT-25
C1709: [NO DATA] FR	—	—	—	×	
C1710: [NO DATA] RR	—	—	—	×	
C1711: [NO DATA] RL	—	—	—	×	
C1716: [PRESSDATA ERR] FL	—	—	—	×	WT-28
C1717: [PRESSDATA ERR] FR	—	—	—	×	
C1718: [PRESSDATA ERR] RR	—	—	—	×	
C1719: [PRESSDATA ERR] RL	—	—	—	×	
C1729: VHCL SPEED SIG ERR	—	—	—	×	WT-30

WITHOUT INTELLIGENT KEY

WITHOUT INTELLIGENT KEY : Reference Value

INFOID:0000000008894595

VALUES ON THE DIAGNOSIS TOOL

NOTE:

The following table includes information (items) inapplicable to this vehicle. For information (items) applicable to this vehicle, refer to CONSULT display items.

Monitor Item	Condition	Value/Status
IGN ON SW	Ignition switch OFF or ACC	Off
	Ignition switch ON	On
KEY ON SW	Mechanical key is removed from key cylinder	Off
	Mechanical key is inserted to key cylinder	On
CDL LOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the lock side	On
CDL UNLOCK SW	Door lock/unlock switch does not operate	Off
	Press door lock/unlock switch to the unlock side	On
DOOR SW-DR	Driver's door closed	Off
	Driver's door opened	On
DOOR SW-AS	Passenger door closed	Off
	Passenger door opened	On
DOOR SW-RR	Rear RH door closed	Off
	Rear RH door opened	On
DOOR SW-RL	Rear LH door closed	Off
	Rear LH door opened	On
BACK DOOR SW	Back door closed	Off
	Back door opened	On
LOCK STATUS	NOTE: The item is indicated, but not monitored.	Off

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
ACC ON SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
KEYLESS LOCK	"LOCK" button of key fob is not pressed	Off
	"LOCK" button of key fob is pressed	On
KEYLESS UNLOCK	"UNLOCK" button of key fob is not pressed	Off
	"UNLOCK" button of key fob is pressed	On
SHOCK SENSOR	NOTE: The item is indicated, but not monitored.	NORMAL
KEY CYL LK-SW	Other than driver door key cylinder LOCK position	Off
	Driver door key cylinder LOCK position	On
KEY CYL UN-SW	Other than driver door key cylinder UNLOCK position	Off
	Driver door key cylinder UNLOCK position	On
VEHICLE SPEED	While driving	Equivalent to speedometer reading
REAR DEF SW	Rear window defogger switch OFF	Off
	Rear window defogger switch ON	On
REVERSE SW CAN	NOTE: The item is indicated, but not used.	Off
		On
TAIL LAMP SW	Lighting switch OFF	Off
	Lighting switch 1ST	On
FR FOG SW	NOTE: The item is indicated, but not monitored.	Off
BUCKLE SW	The seat belt (driver side) is fastened. [Seat belt switch (driver side) OFF]	Off
	The seat belt (driver side) is unfastened. [Seat belt switch (driver side) ON]	On
TRNK/HAT MNTR	NOTE: The item is indicated, but not monitored.	Off
ACC SW	Ignition switch OFF	Off
	Ignition switch ACC or ON	On
KYLS TRNK/HAT	NOTE: The item is indicated, but not monitored.	Off
KEYLESS PANIC	PANIC button of key fob is not pressed	Off
	PANIC button of key fob is pressed	On
HI BEAM SW	Lighting switch OFF	Off
	Lighting switch HI	On
HEAD LAMP SW 1	Lighting switch OFF	Off
	Lighting switch 2ND	On
HEAD LAMP SW 2	Lighting switch OFF	Off
	Lighting switch 2ND	On
AUTO LIGHT SW	NOTE: The item is indicated, but not monitored.	Off
PASSING SW	Other than lighting switch PASS	Off
	Lighting switch PASS	On
RR FOG SW	NOTE: The item is indicated, but not monitored.	Off
TURN SIGNAL R	Turn signal switch OFF	Off
	Turn signal switch RH	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status	
TURN SIGNAL L	Turn signal switch OFF	Off	A
	Turn signal switch LH	On	
PKB SW	Parking brake switch is OFF	Off	B
	Parking brake switch is ON	On	
ENGINE RUN	Engine stopped	Off	C
	Engine running	On	
OPTI SEN (DTCT)	NOTE: The item is indicated, but not monitored.	Close to 5 V	D
OPTI SEN (FILT)	NOTE: The item is indicated, but not monitored.	Close to 5 V	
LIG SEN COND	NOTE: The item is indicated, but not monitored.	OFF	E
IGN SW CAN	Ignition switch OFF or ACC	Off	
	Ignition switch ON	On	F
FR WIPER HI	Front wiper switch OFF	Off	
	Front wiper switch HI	On	G
FR WIPER LOW	Front wiper switch OFF	Off	
	Front wiper switch LO	On	H
FR WIPER INT	Front wiper switch OFF	Off	
	Front wiper switch INT	On	I
FR WASHER SW	Front washer switch OFF	Off	
	Front washer switch ON	On	J
INT VOLUME	Wiper intermittent dial is in a dial position 1 - 7	1 - 7	
FR WIPER STOP	Any position other than front wiper stop position	Off	
	Front wiper stop position	On	K
RR WIPER ON	Rear wiper switch OFF	Off	
	Rear wiper switch ON	On	
RR WIPER INT	Rear wiper switch OFF	Off	
	Rear wiper switch INT	On	INL
RR WASHER SW	Rear washer switch OFF	Off	
	Rear washer switch ON	On	
RR WIPER STOP	Rear wiper stop position	Off	M
	Other than rear wiper stop position	On	
RAIN SENSOR	NOTE: The item is indicated, but not monitored.	Off	N
HAZARD SW	Hazard switch OFF	Off	
	Hazard switch ON	On	O
FAN ON SIG	Blower control dial OFF	Off	
	Other than blower control dial OFF	On	P
AIR COND SW	A/C switch OFF	Off	
	A/C switch ON	On	
THERMO AMP	Ignition switch ON	Off	
	Evaporator is extremely low temperature	On	
FR DEF SW	Other than A/C mode defroster ON position	Off	
	A/C mode defroster ON position	On	

BCM (BODY CONTROL MODULE)

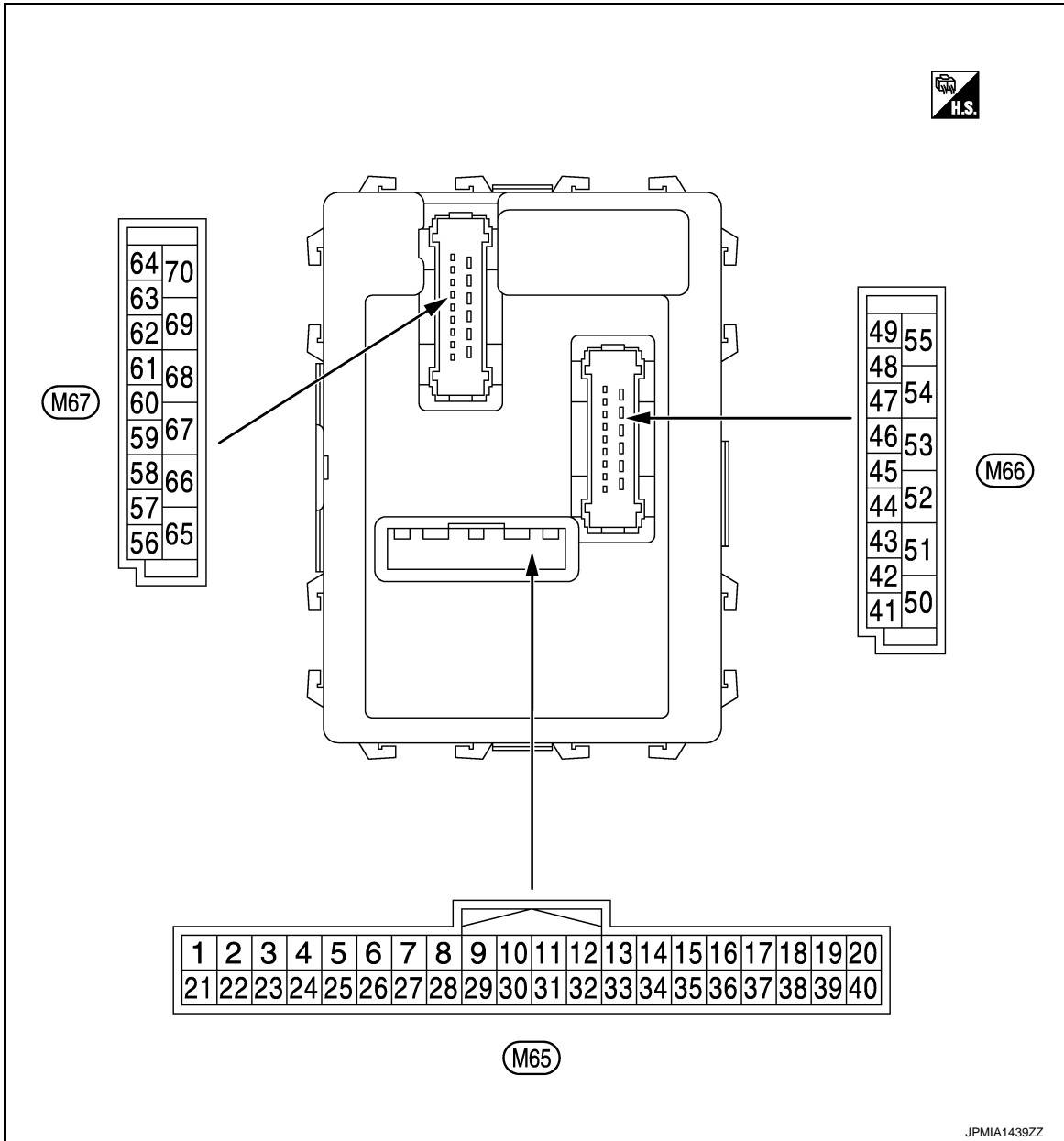
< ECU DIAGNOSIS INFORMATION >

Monitor Item	Condition	Value/Status
KEYLESS TRUNK	NOTE: The item is indicated, but not monitored.	Off
TRNK OPNR SW	NOTE: The item is indicated, but not monitored.	Off
TRNK OPN MNTR	NOTE: The item is indicated, but not monitored.	Off
HOOD SW	Close the hood	Off
	Open the hood	On
TRANSPONDER	Other than the ignition switch is ON by key registered to BCM.	Off
	The ignition switch is ON by key registered to BCM.	On
INTELLI KEY	NOTE: The item is indicated, but not used.	Off
AUTO RELOCK	NOTE: The item is indicated, but not monitored.	Off
OIL PRESS SW	<ul style="list-style-type: none"> • Ignition switch OFF or ACC • Engine running 	Off
	Ignition switch ON	On
BRAKE SW	Brake pedal is not depressed	Off
	Brake pedal is depressed	On

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

TERMINAL LAYOUT



NOTE:

- M65, M66: White
- M67: Black

PHYSICAL VALUES

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
2 (BR/W)	Ground	Combination switch INPUT 5	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch RH	
					Lighting switch HI	
					Lighting switch 1ST	
				Lighting switch 2ND		
3 (GR)	Ground	Combination switch INPUT 4	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Turn signal switch LH	
					Lighting switch PASS	
					Lighting switch 2ND	
4 (L/Y)	Ground	Combination switch INPUT 3	Input	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	0 V
					Front wiper switch LO	
					Front wiper switch MIST	
					Front wiper switch INT	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

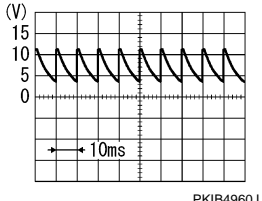
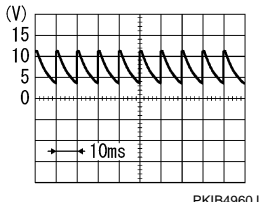
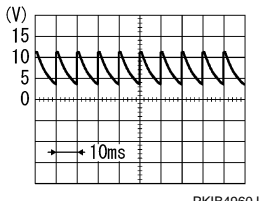
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
5 (G)	Ground	Combination switch INPUT 2	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front washer switch (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
Rear wiper switch ON (Wiper intermittent dial 4)		0.8 V				
6 (L/R)	Ground	Combination switch INPUT 1	Input	Combination switch	All switch OFF (Wiper intermittent dial 4)	0 V
					Front wiper switch HI (Wiper intermittent dial 4)	
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Wiper intermittent dial 3 (All switch OFF)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 	
Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 6 • Wiper intermittent dial 7 		0.8 V				

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
7 (W/R)	Ground	Door key cylinder switch UNLOCK	Input	Door key cylin- der switch	NEUTRAL position	 7.0 - 8.0 V
					UNLOCK position	0 V
8 (W/B)	Ground	Door key cylinder switch LOCK	Input	Door key cylin- der switch	NEUTRAL position	12 V
					LOCK position	0 V
9 (R)	Ground	Stop lamp switch	Input	Stop lamp switch	OFF (Brake pedal is not depressed)	0 V
					ON (Brake pedal is de- pressed)	Battery voltage
10 (W/L)	Ground	Rear window defog- ger switch	Input	Rear window defogger switch	OFF (Not pressed)	12 V
					ON (Pressed)	0 V
11 (L/Y)	Ground	Ignition switch ACC	Input	Ignition switch OFF		0 V
				Ignition switch ACC or ON		Battery voltage
12 (SB)	Ground	Passenger door switch	Input	Passenger door switch	OFF (When passenger door closed)	 7.0 - 8.0 V
					ON (When passenger door opened)	0 V
13 (GR/L)	Ground	Rear RH door switch	Input	Rear RH door switch	OFF (When rear RH door closed)	 7.0 - 8.0 V
					ON (When rear RH door opened)	0 V
18 (V)	Ground	Receiver ground	Input	Ignition switch ON		0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
+	-	Signal name	Input/ Output			
19 (BR)	Ground	Remote keyless entry receiver power supply	Input	Ignition switch OFF	Insert mechanical key into ignition key cylinder	0 V
					Remove mechanical key from ignition key cylinder (Any door opened)	5 V
					Remove mechanical key from ignition key cylinder (Any door closed)	<p style="text-align: right; font-size: small;">JPMA0338JP</p>
20 (G/Y)	Ground	Remote keyless entry receiver communication	Input	Ignition switch OFF	Insert mechanical key into ignition key cylinder	0 V
					Waiting	<p style="text-align: right; font-size: small;">PIIB7728J</p>
					Signal receiving	<p style="text-align: right; font-size: small;">PIIB7729J</p>
21 (P/L)	Ground	NATS antenna amp.	Input/ Output	Just after inserting ignition key in key cylinder	Pointer of tester should move	
				Other than above	0 V	
23 (R/Y)	Ground	Security indicator	Input	Security indicator	ON	0 V
					Blinking (Ignition switch OFF)	<p style="text-align: right; font-size: small;">JPMA0014GB</p>
					OFF	12 V
24* (GR/B)	Ground	Dongle link	Input/ Output	Ignition switch OFF	5 V	
25 (LG)	Ground	NATS antenna amp.	Input/ Output	Just after inserting ignition key in key cylinder	Pointer of tester should move	
				Other than above	0 V	
26 (GR)	Ground	Thermo control amp.	Input	Ignition switch ON	0 V	
				Evaporator is extremely low temperature	12 V	

A
B
C
D
E
F
G
H
I
J
K

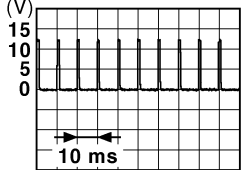
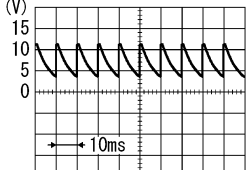
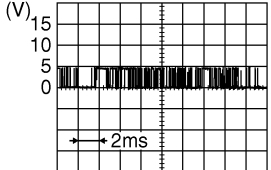
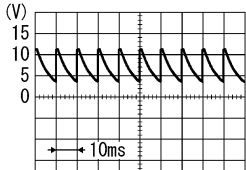
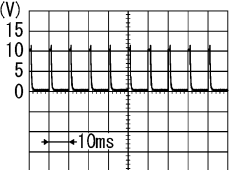
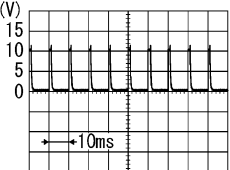
INL

M
N
O

P

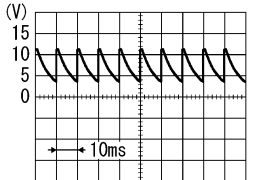
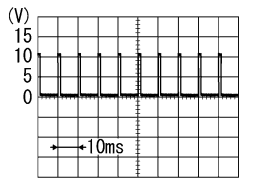
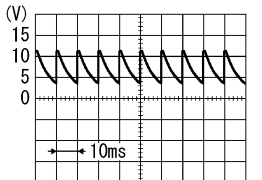
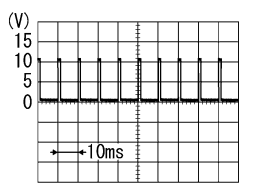
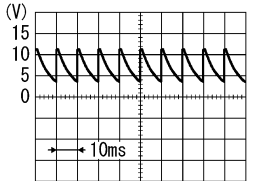
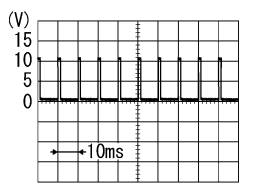
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
27 (Y/G)	Ground	A/C switch	Input	A/C switch	OFF	 <small>JPMIA0012GB</small> 1.0 - 1.5 V
					ON	0 V
28 (G/W)	Ground	Blower fan switch	Input	Fan switch	Blower fan switch OFF	 <small>PKIB4960J</small> 7.0 - 8.0 V
					Blower fan switch ON	0 V
29 (L/W)	Ground	Hazard switch	Input	Hazard switch	OFF	Battery voltage
					ON	0 V
31 (G/Y)	Ground	Front defroster switch	Input	Ignition switch ON	A/C mode defroster ON position	0 V
					Other than A/C mode defroster ON position	 <small>JPMIA0589GB</small> 8.0 - 9.0 V
32 (LG)	Ground	Combination switch OUTPUT 5	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <small>PKIB4960J</small> 7.0 - 8.0 V
					Rear wiper switch ON (Wiper intermittent dial 4)	 <small>PKIB4956J</small> 1.0 V
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 6 • Wiper intermittent dial 7 	 <small>PKIB4956J</small> 1.0 V

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

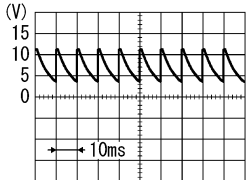
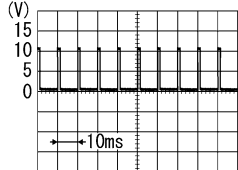
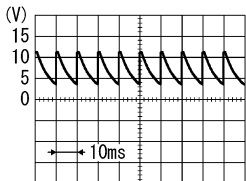
Terminal No. (Wire color)		Description		Condition	Value (Approx.)	
		Signal name	Input/ Output			
+	-					
33 (Y/L)	Ground	Combination switch OUTPUT 4	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 1ST (Wiper intermittent dial 4)	 <p style="text-align: center;">1.2 V</p>
					Rear wiper switch INT (Wiper intermittent dial 4)	
					Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 5 • Wiper intermittent dial 6 	
34 (W)	Ground	Combination switch OUTPUT 3	Output	Combination switch	All switch OFF (Wiper intermittent dial 4)	 <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND (Wiper intermittent dial 4)	 <p style="text-align: center;">1.2 V</p>
					Lighting switch HI (Wiper intermittent dial 4)	
					Rear washer switch ON (Wiper intermittent dial 4)	
Any of the condition below with all switch OFF <ul style="list-style-type: none"> • Wiper intermittent dial 1 • Wiper intermittent dial 2 • Wiper intermittent dial 3 						
35 (R/L)	Ground	Combination switch OUTPUT 2	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 <p style="text-align: center;">7.0 - 8.0 V</p>
					Lighting switch 2ND	 <p style="text-align: center;">1.2 V</p>
					Lighting switch PASS	
					Front wiper switch INT	
Front wiper switch HI						

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P



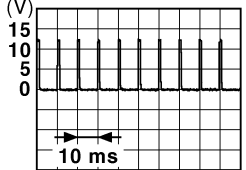
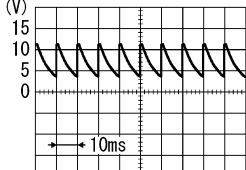
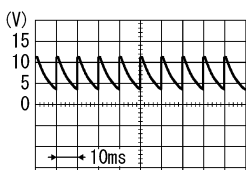
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
36 (L/O)	Ground	Combination switch OUTPUT 1	Output	Combination switch (Wiper intermit- tent dial 4)	All switch OFF	 7.0 - 8.0 V
					Turn signal switch RH	 1.2 V
					Turn signal switch LH	
					Front wiper switch LO (Front wiper switch MIST)	
Front washer switch ON						
37 (R/W)	Ground	Key switch	Input	Insert mechanical key into ignition key cylinder	Battery voltage	
				Remove mechanical key from ignition key cylinder	0 V	
38 (O)	Ground	Ignition switch ON	Input	Ignition switch OFF or ACC	0 V	
				Ignition switch ON	Battery voltage	
39 (L)	Ground	CAN-H	Input/ Output	—	—	
40 (P)	Ground	CAN-L	Input/ Output	—	—	
43 (W)	Ground	Back door switch	Input	Back door switch	OFF (When back door closed) ON (When back door opened)	 7.0 - 8.0 V 0 V
				Rear wiper stop position	Ignition switch ON	12 V
44 (LG)	Ground	Rear wiper stop po- sition	Input	Any position other than rear wiper stop position	0 V	
				Door lock and unlock switch LOCK	Input	Door lock and unlock switch
45 (GR)	Ground	Door lock and unlock switch LOCK	Input	NEUTRAL position	1.0 - 1.5 V	
				LOCK position	0 V	

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

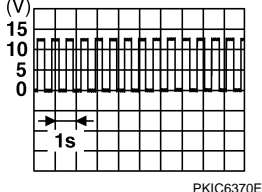
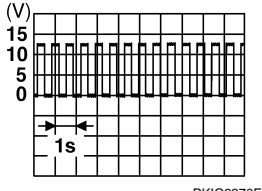
Terminal No. (Wire color)		Description		Condition		Value (Approx.)
+	-	Signal name	Input/ Output			
46 (BR)	Ground	Door lock and unlock switch UNLOCK	Input	Door lock and unlock switch	NEUTRAL position	 1.0 - 1.5 V
					UNLOCK position	0 V
47 (BR/Y)	Ground	Driver door switch	Input	Driver door switch	OFF (When driver door closed)	 7.0 - 8.0 V
					ON (When driver door opened)	0 V
48 (W/G)	Ground	Rear LH door switch	Input	Rear LH door switch	OFF (When rear LH door closed)	 7.0 - 8.0 V
					ON (When rear LH door opened)	0 V
50 (SB)	Ground	A/C indicator	Output	A/C indicator	OFF	12 V
					ON	0 V
54 (LG)	Ground	Rear wiper	Output	Ignition switch ON	Rear wiper switch OFF	0 V
					Rear wiper switch ON	12 V
56 (L)	Ground	Interior room lamp power supply	Output	Interior room lamp battery saver is activated. (Cuts the interior room lamp power supply)	0 V	
				Interior room lamp battery saver is not activated. (Outputs the interior room lamp power supply)	12 V	
57 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage	
59 (L/B)	Ground	Driver door UNLOCK	Output	Driver door	UNLOCK (Actuator is activated)	12 V
					Other than UNLOCK (Actuator is not activated)	0 V

A
B
C
D
E
F
G
H
I
J
K
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Terminal No. (Wire color)		Description		Condition	Value (Approx.)
+	-	Signal name	Input/ Output		
60 (W/B)	Ground	Turn signal LH	Output	Ignition switch ON	0 V
				Turn signal switch OFF	6.0 V
					
61 (W/L)	Ground	Turn signal RH	Output	Ignition switch ON	0 V
				Turn signal switch OFF	6.0 V
					
63 (BR)	Ground	Interior room lamp control signal	Output	Interior room lamp	12 V
				OFF	0 V
65 (V)	Ground	All doors LOCK	Output	All doors	12 V
				LOCK (Actuator is activated)	0 V
66 (G)	Ground	Passenger door and rear door UNLOCK	Output	Passenger door and rear door	12 V
				UNLOCK (Actuator is activated)	0 V
67 (B)	Ground	Ground	Output	Ignition switch ON	0 V
				Other then LOCK (Actuator is not activated)	0 V
68 (L)	Ground	P/W power supply (IGN)	Output	Ignition switch ON	12 V
69 (P)	Ground	P/W power supply (BAT)	Output	Ignition switch OFF	12 V
70 (Y)	Ground	Battery power supply	Input	Ignition switch OFF	Battery voltage


*: For Canada

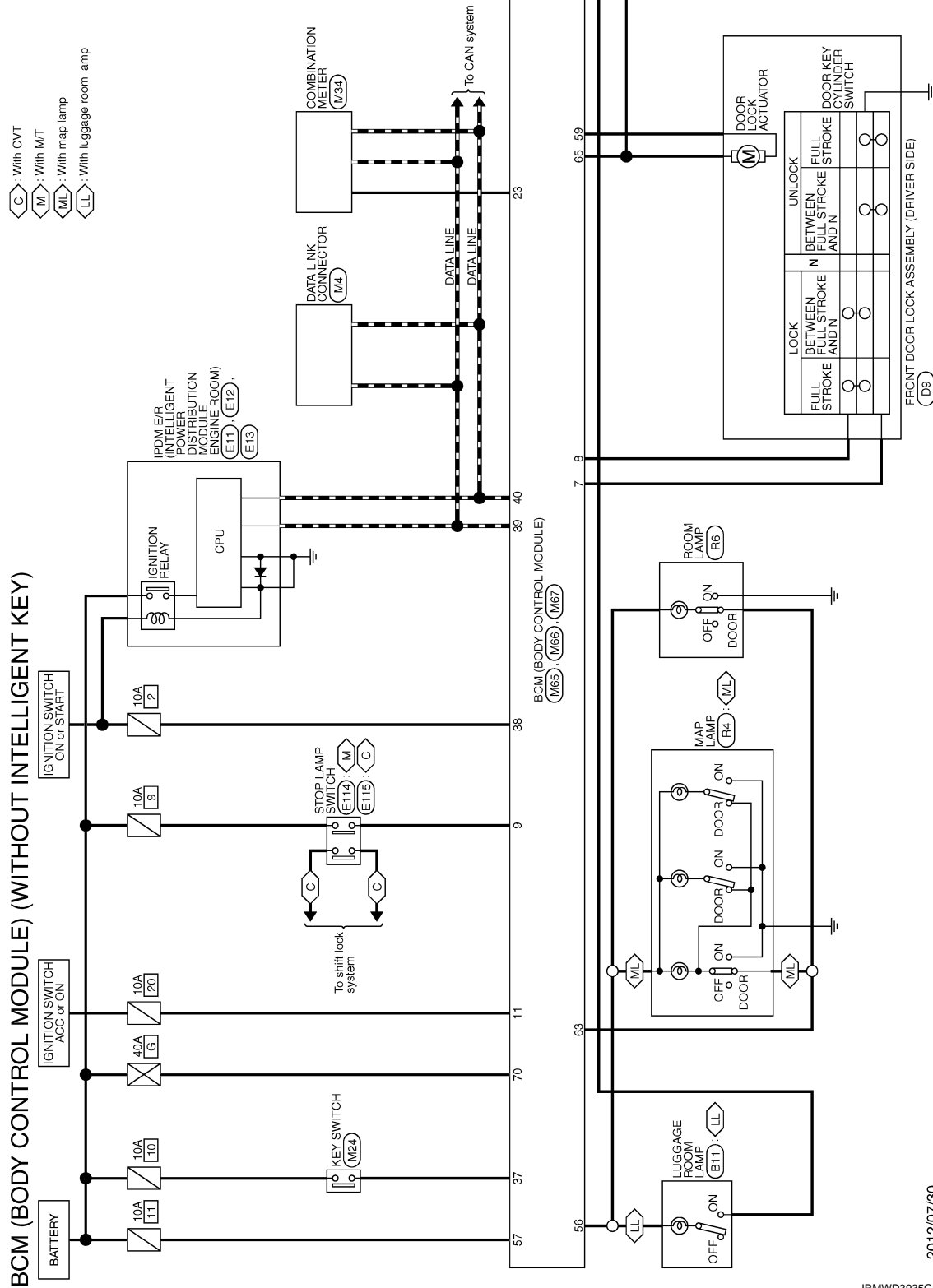
BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

WITHOUT INTELLIGENT KEY : Wiring Diagram - BCM -

INFOID:000000008894596

For connector terminal arrangements, harness layouts, and alphabets in a  (option abbreviation; if not described in wiring diagram), refer to [GI-12, "Connector Information"](#).



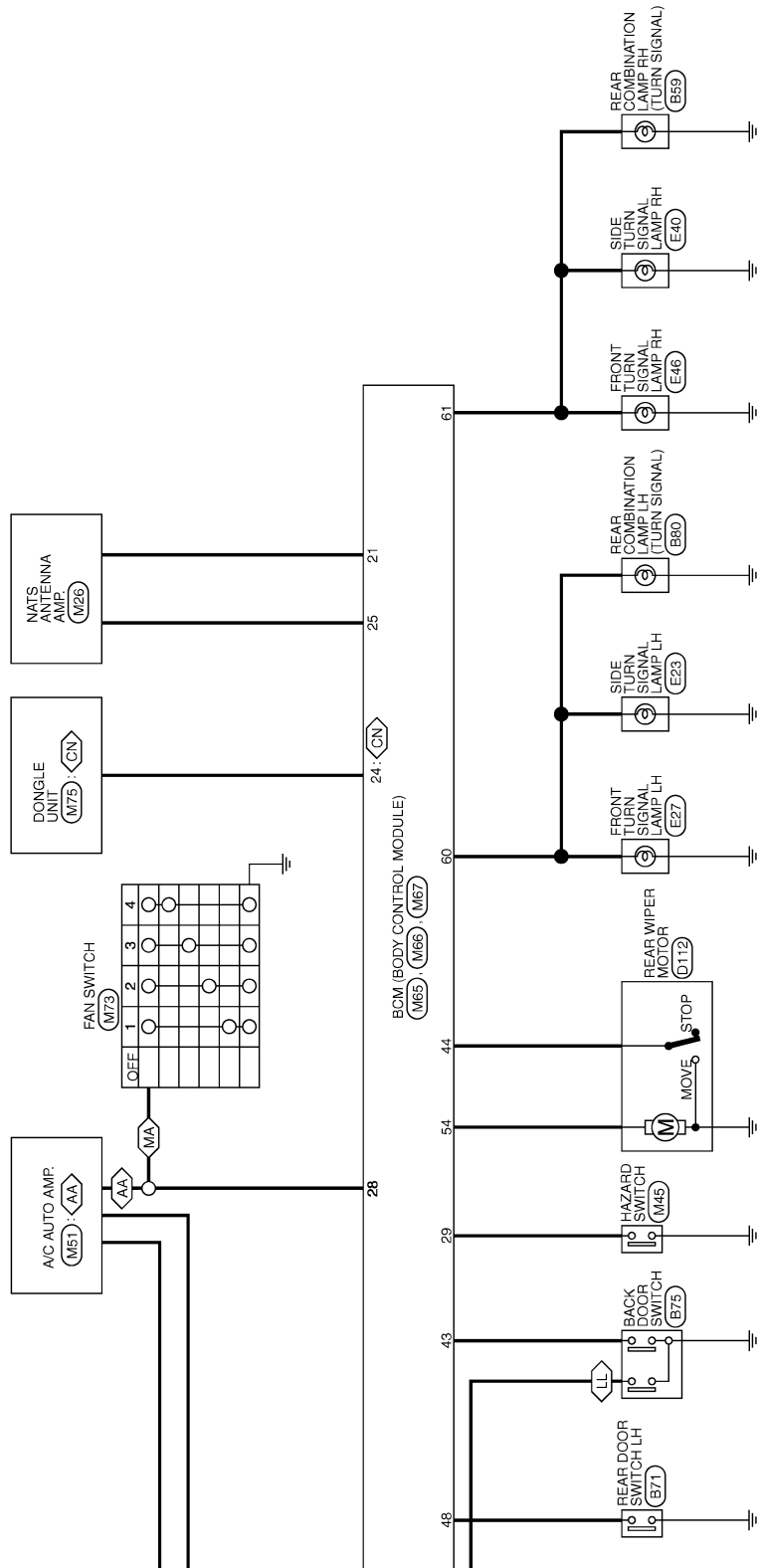
A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

- : For Canada
- : With auto A/C
- : With manual A/C
- : With luggage room lamp



WITHOUT INTELLIGENT KEY : Fail-safe

FAIL-SAFE CONTROL BY DTC

BCM performs fail-safe control when any DTC are detected.

JRMWD3937GB

INFOID:0000000008894597

A
B
C
D
E
F
G
H
I
J
K
INL
M
N
O
P

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

Display contents of CONSULT	Fail-safe	Cancellation
B2190: NATS ANTENNA AMP	Inhibit engine cranking	Erase DTC
B2191: DIFFERENCE OF KEY	Inhibit engine cranking	Erase DTC
B2192: ID DISCORD BCM-ECM	Inhibit engine cranking	Erase DTC
B2193: CHAIN OF BCM-ECM	Inhibit engine cranking	Erase DTC
B2195: ANTI SCANNING	Inhibit engine cranking	Ignition switch ON → OFF
B2196: DONGLE NG	Inhibit engine cranking	Erase DTC

REAR WIPER MOTOR PROTECTION

BCM detects the rear wiper stopping position according to the rear wiper auto stop signal.

When the rear wiper auto stop signal does not change more than 5 seconds while driving the rear wiper, BCM stops power supply to protect the rear wiper motor.

Condition of cancellation

1. Pass more than 1 minute after the rear wiper stop.
2. Turn rear wiper switch OFF.
3. Operate the rear wiper switch or rear washer switch.

WITHOUT INTELLIGENT KEY : DTC Inspection Priority Chart

INFOID:000000008894598

If some DTCs are displayed at the same time, perform inspections one by one based on the following priority chart.

Priority	DTC
1	<ul style="list-style-type: none"> • U1000: CAN COMM • U1010: CONTROL UNIT (CAN)
2	<ul style="list-style-type: none"> • B2190: NATS ANTENNA AMP • B2191: DIFFERENCE OF KEY • B2192: ID DISCORD BCM-ECM • B2193: CHAIN OF BCM-ECM • B2195: ANTI SCANNING • B2196: DONGLE NG
3	C1735: IGN CIRCUIT OPEN
4	<ul style="list-style-type: none"> • C1704: LOW PRESSURE FL • C1705: LOW PRESSURE FR • C1706: LOW PRESSURE RR • C1707: LOW PRESSURE RL • C1708: [NO DATA] FL • C1709: [NO DATA] FR • C1710: [NO DATA] RR • C1711: [NO DATA] RL • C1716: [PRESSDATA ERR] FL • C1717: [PRESSDATA ERR] FR • C1718: [PRESSDATA ERR] RR • C1719: [PRESSDATA ERR] RL • C1729: VHCL SPEED SIG ERR

WITHOUT INTELLIGENT KEY : DTC Index

INFOID:000000008894599

NOTE:

Details of time display

- CRNT: Displays when there is a malfunction now or after returning to the normal condition until turning ignition switch OFF → ON again.
- 1 - 39: Displayed if any previous malfunction is present when current condition is normal. It increases like 1 → 2 → 3...38 → 39 after returning to the normal condition whenever ignition switch OFF → ON. The counter remains at 39 even if the number of cycles exceeds it. It is counted from 1 again when turning ignition switch OFF → ON after returning to the normal condition if the malfunction is detected again.

BCM (BODY CONTROL MODULE)

< ECU DIAGNOSIS INFORMATION >

CONSULT display	Fail-safe	Tire pressure monitor warn- ing lamp ON	Reference
U1000: CAN COMM	—	—	BCS-115
U1010: CONTROL UNIT (CAN)	—	—	BCS-116
B2190: NATS ANTENNA AMP	×	—	SEC-173
B2191: DIFFERENCE OF KEY	×	—	SEC-176
B2192: ID DISCORD BCM-ECM	×	—	SEC-177
B2193: CHAIN OF BCM-ECM	×	—	SEC-178
B2195: ANTI SCANNING	×	—	SEC-179
B2196: DONGLE NG	×	—	SEC-180
C1704: LOW PRESSURE FL	—	×	WT-23
C1705: LOW PRESSURE FR	—	×	
C1706: LOW PRESSURE RR	—	×	
C1707: LOW PRESSURE RL	—	×	WT-25
C1708: [NO DATA] FL	—	×	
C1709: [NO DATA] FR	—	×	
C1710: [NO DATA] RR	—	×	
C1711: [NO DATA] RL	—	×	WT-28
C1716: [PRESS DATA ERR] FL	—	×	
C1717: [PRESS DATA ERR] FR	—	×	
C1718: [PRESS DATA ERR] RR	—	×	
C1719: [PRESS DATA ERR] RL	—	×	WT-30
C1729: VHCL SPEED SIG ERR	—	×	
C1735: IGN CIRCUIT OPEN	—	—	BCS-117

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

INTERIOR LIGHTING SYSTEM SYMPTOMS

< SYMPTOM DIAGNOSIS >

SYMPTOM DIAGNOSIS

INTERIOR LIGHTING SYSTEM SYMPTOMS

Symptom Table

INFOID:000000008452542

NOTE:

Perform the self-diagnosis with CONSULT before the symptom diagnosis. Perform the trouble diagnosis if any DTC is detected.

Symptom	Possible cause	Inspection item
All the following lamps do not turn ON. <ul style="list-style-type: none"> • Map lamp • Room lamp • Luggage room lamp 	<ul style="list-style-type: none"> • Harness between BCM and each interior room lamp • BCM 	Interior room lamp power supply circuit Refer to INL-24 .
<ul style="list-style-type: none"> • Interior room lamp does not turn ON even though the door is open. (It turns ON when turning the interior room lamp ON.) • Interior room lamp does not turn OFF even though the door is closed. 	<ul style="list-style-type: none"> • Harness between BCM and each door switch • Harness between BCM and each interior room lamp • BCM 	Door switch circuit Refer to DLK-55 . Interior room lamp control circuit Refer to INL-26 .
Interior room lamp timer does not activate. (It turns ON/ OFF when the door opens/closes.)	—	Check the interior room lamp setting. Refer to INL-15 .
Push-button ignition switch illumination does not illuminate.	<ul style="list-style-type: none"> • Harness between BCM and push-button ignition switch • Harness between push-button ignition switch and ground • Push-button ignition switch • BCM 	Push-button ignition switch illumination circuit Refer to INL-28 .
Interior room lamp battery saver does not activate.	—	Check the interior room lamp battery saver setting. Refer to INL-16 .

PRECAUTIONS

< PRECAUTION >

PRECAUTION

PRECAUTIONS

Precaution for Supplemental Restraint System (SRS) "AIR BAG" and "SEAT BELT PRE-TENSIONER"

INFOID:000000008452543

The Supplemental Restraint System such as "AIR BAG" and "SEAT BELT PRE-TENSIONER", used along with a front seat belt, helps to reduce the risk or severity of injury to the driver and front passenger for certain types of collision. This system includes seat belt switch inputs and dual stage front air bag modules. The SRS system uses the seat belt switches to determine the front air bag deployment, and may only deploy one front air bag, depending on the severity of a collision and whether the front occupants are belted or unbelted. Information necessary to service the system safely is included in the "SRS AIR BAG" and "SEAT BELT" of this Service Manual.

WARNING:

Always observe the following items for preventing accidental activation.

- To avoid rendering the SRS inoperative, which could increase the risk of personal injury or death in the event of a collision that would result in air bag inflation, all maintenance must be performed by an authorized NISSAN/INFINITI dealer.
- Improper maintenance, including incorrect removal and installation of the SRS, can lead to personal injury caused by unintentional activation of the system. For removal of Spiral Cable and Air Bag Module, see "SRS AIR BAG".
- Never use electrical test equipment on any circuit related to the SRS unless instructed to in this Service Manual. SRS wiring harnesses can be identified by yellow and/or orange harnesses or harness connectors.

PRECAUTIONS WHEN USING POWER TOOLS (AIR OR ELECTRIC) AND HAMMERS

WARNING:

Always observe the following items for preventing accidental activation.

- When working near the Air Bag Diagnosis Sensor Unit or other Air Bag System sensors with the ignition ON or engine running, never use air or electric power tools or strike near the sensor(s) with a hammer. Heavy vibration could activate the sensor(s) and deploy the air bag(s), possibly causing serious injury.
- When using air or electric power tools or hammers, always switch the ignition OFF, disconnect the battery, and wait at least 3 minutes before performing any service.

A
B
C
D
E
F
G
H
I
J
K
L
M
N
O
P

INL

MAP LAMP

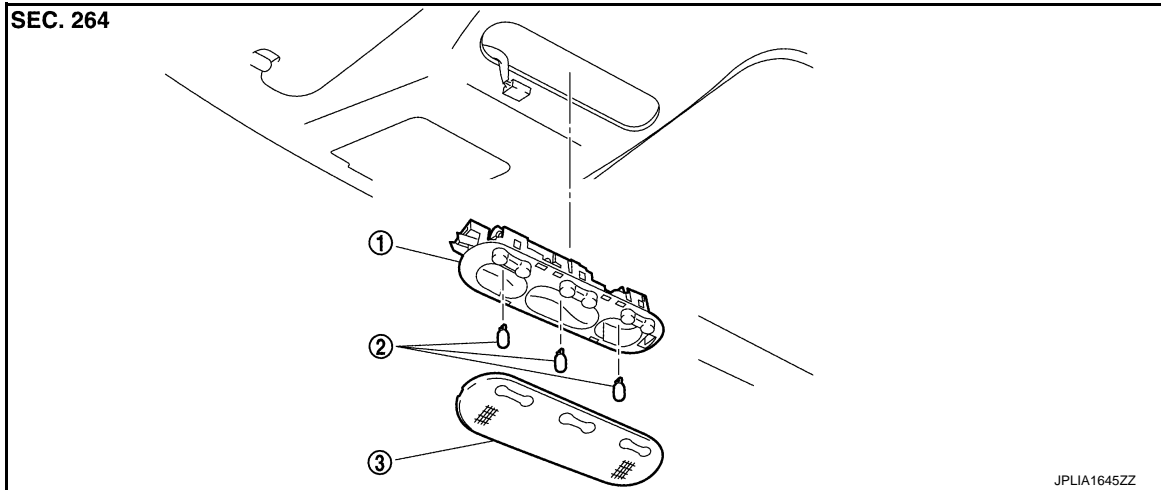
< REMOVAL AND INSTALLATION >

REMOVAL AND INSTALLATION

MAP LAMP

Exploded View

INFOID:000000008452544



1. Map lamp bulb housing

2. Bulb

3. Lens

Removal and Installation

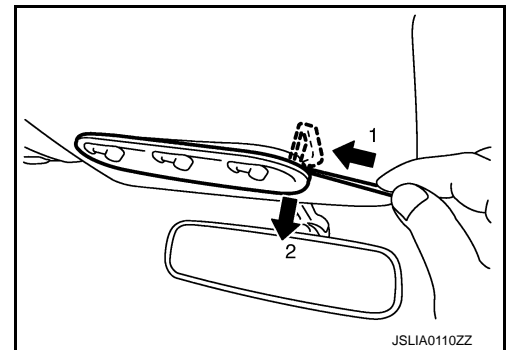
INFOID:000000008452545

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

1. Insert any appropriate tool into the gap between the map lamp bulb housing to the headlining. And press the pawl and then pull the map lamp .



2. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000008452546

CAUTION:

- **Disconnect the battery negative terminal or the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

MAP LAMP BULB

MAP LAMP

< REMOVAL AND INSTALLATION >

1. Remove the map lamp.
2. Remove the lens.
3. Remove the bulb.

A

B

C

D

E

F

G

H

I

J

K

INL

M

N

O

P

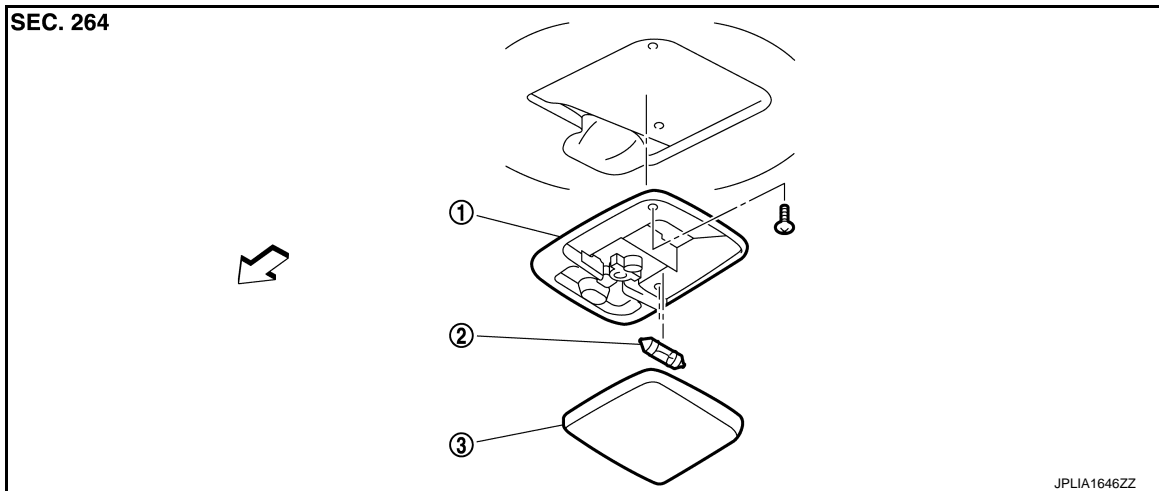
ROOM LAMP

< REMOVAL AND INSTALLATION >

ROOM LAMP

Exploded View

INFOID:000000008452547



1. Room lamp bulb housing

2. Bulb

3. Lens

↩ : Vehicle front

Removal and Installation

INFOID:000000008452548

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

1. Insert any appropriate tool into the gap between the lens. And then remove the lens.
2. Remove room lamp housing mounting screw. And then remove the room lamp bulb housing.
3. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000008452549

CAUTION:

- **Disconnect the battery negative terminal or the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

ROOM LAMP BULB

1. Insert any appropriate tool into the gap between the lens. And then remove the lens.
2. Remove the bulb.

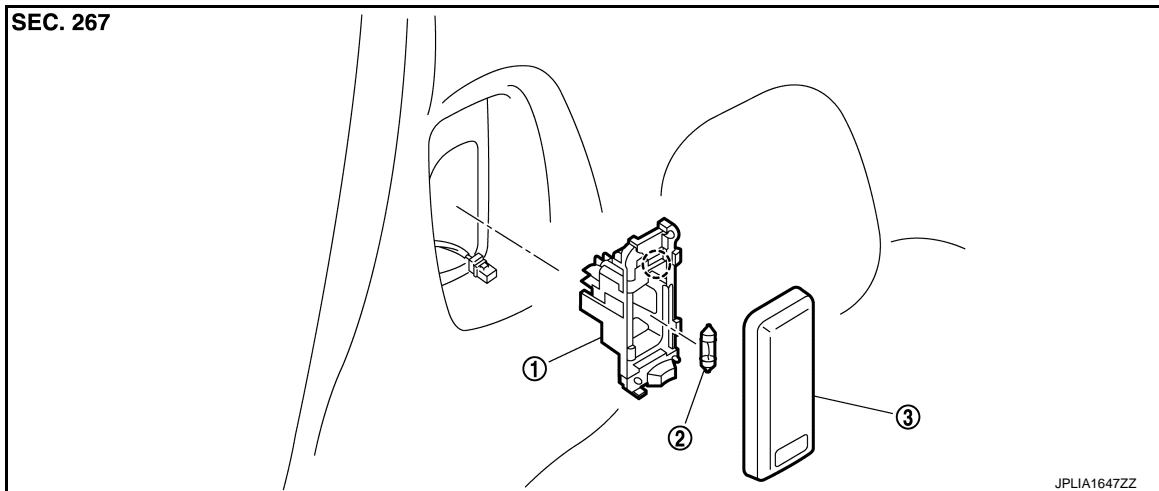
LUGGAGE ROOM LAMP

< REMOVAL AND INSTALLATION >


LUGGAGE ROOM LAMP

Exploded View

INFOID:000000008452550



1. Luggage room lamp housing
2. Bulb
3. lens

 :Pawl

Removal and Installation

INFOID:000000008452551

CAUTION:

Disconnect the battery negative terminal or the fuse.

REMOVAL

1. Insert any appropriate tool into the gap between the lens. Remove the lens.
2. Push the pawl and then remove the luggage room lamp.
3. Disconnect the connector.

INSTALLATION

Install in the reverse order of removal.

Replacement

INFOID:000000008452552

CAUTION:

- **Disconnect the battery negative terminal or the fuse.**
- **Never touch the glass of bulb directly by hand. Keep grease and other oily matters away from it.**
- **Never touch bulb by hand while it is lit or right after being turned off.**
- **Never leave bulb out of lamp reflector for a long time because dust, moisture smoke, etc. may affect the performance of lamp. When replacing bulb, be sure to replace it with new one.**

LUGGAGE ROOM LAMP BULB

1. Remove the luggage room lamp.
2. Remove the lens.
3. Remove the bulb.

SERVICE DATA AND SPECIFICATIONS (SDS)

< SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

SERVICE DATA AND SPECIFICATIONS (SDS)

Bulb Specifications

INFOID:000000008452553

Item	Type	Wattage (W)
Map lamp	W5W	5
Room lamp	—	10
Luggage room lamp	—	5
Push-button ignition switch illumination*	LED	—

*:Only with Intelligent Key